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ABSTRACT

This document reports the results of a comparative analysis of the current situation and future needs of teacher and trainer training in the countries of Central and Eastern Europe. Following an introductory section explaining the methodology of the study, the second section focuses on features common to teacher and trainer training in all Central and Eastern European countries and provides examples of these features in various countries. The third section examines the needs and obstacles in vocational teacher and trainer training in Central and Eastern European countries, such as the quest for quality and relevance, decentralization of control of the vocational education and training system, the change from teaching to learning, teacher teams, theory and practice, and the stress of coping with the requirements of lifelong learning. The fourth section provides recommendations for the renewal of teacher and trainer training in these countries. Finally, an appendix, which makes up more than half the document, provides reviews of the vocational education and training system in the following 12 countries: (1) Albania, (2) Bulgaria, (3) the Czech Republic, (4) Estonia, (5) Hungary, (6) Latvia, (7) Lithuania, (8) Macedonia, (9) Poland, (10) Romania, (11) the Slovak Republic, and (12) Slovenia. (KC)

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ED 441 159

A Cross Country Review of needs, achievements and obstacles in Central and Eastern Europe

J. Austey

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REPORT

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Reshaping the focus of vocational teacher and trainer training

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with contributions from
Susanne Gottlieb and Dorte Sørensen

DEL, Copenhagen
June 1999

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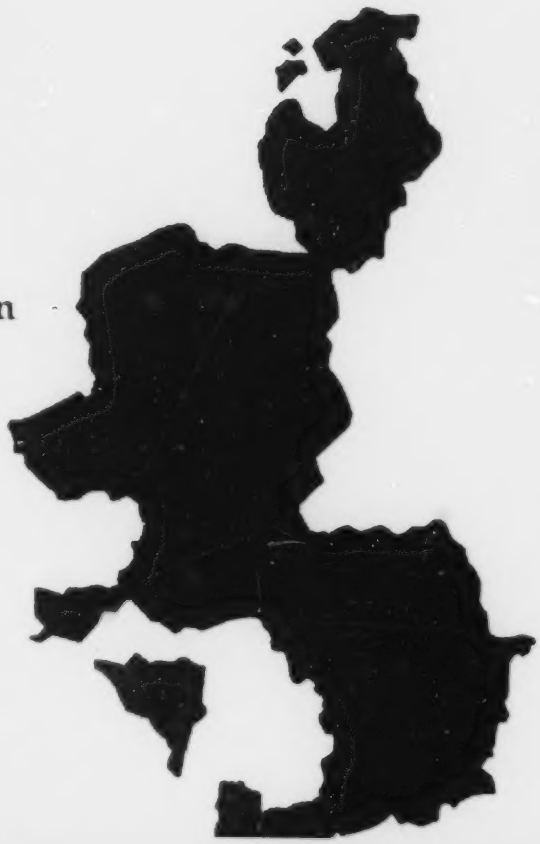

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1. Introduction

Vocational education and training reform in all the candidate countries of Central and Eastern Europe has the common objective of creating a system which is capable of meeting the demands of an open, competitive labour market. A functioning market economy is a prerequisite of EU accession and an open and adaptable vocational education and training system is a key component of such an economy.

The countries of Central and Eastern Europe have embarked on restructuring their vocational education and training systems from a very difficult position. The basic elements of these systems have to be modernised and structural changes in the way they function have to be introduced. Their vocational school systems have been characterised by extreme over-specialisation: lower vocational schools used to provide training for as many as 250 different occupations and secondary vocational schools for almost 300. There were three components in vocational education: general education; theoretical technical education; and practical technical and vocational education. The latter took place either in the workplace or a school workshop. As in many Western countries, there have been problems in achieving a balanced relationship between these different components. Generally, the relationship between general and vocational education has been very poorly developed. Education was, and still is, subject-based and the teaching methods used by specialised teachers are very traditional. The relationship between theoretical and practical learning is still not satisfactory, as the latter is organised, essentially, as practical work experience rather than as learning through practice.

The Phare Vocational Education and Training Reform programmes and other aid programmes have provided considerable investment in the reform of vocational training in the countries of Central and Eastern Europe. The Phare Programme has adopted a "pilot school" approach to vocational education and training reform. It has also supported: the development of new dynamic curricula; the organisation of teacher-training courses in modern teaching methodology; the establishment of working relationships with vocational schools in other European countries; and the upgrading of teaching materials and equipment. In general, there is insufficient institutional capacity to deliver the level of training that is necessary for large-scale restructuring. One basic and direct way of tackling this lack of capacity is to upgrade vocational teacher training. This, however, will require the investment of substantial resources.

On the other hand, it is important to recall that these countries are not starting from scratch in their education and training reform efforts. General education systems in these countries have often managed to attain better literacy and numeracy levels than their more prosperous EU neighbours. Thus, vocational education and training reforms have a solid education base to build on. Furthermore, there is, in the countries involved, an understanding of the fact that the success of their efforts to overhaul and change vocational training depends, to a large extent, on vocational teachers and trainers.

This basic orientation is, perhaps, most clearly formulated in the Lithuanian White Paper (1998):

> *"Vocational training, based on democratic beliefs, is founded on the initiative of educators and their active participation in evaluation processes and in planning and developing the content of training. That is why the proper education and training of educators is the main prerequisite of change in vocational training and in the satisfaction of individual and societal training needs."*[1]
> (Case study on the training of teachers and trainers in Lithuania)

This report contains the results of a cross-country review of the development of teacher and trainer training in the partner countries of Central and Eastern Europe. What is the state of the art, what has been achieved and what still remains to be done? Information on vocational teaching personnel in the partner countries is still incomplete and our knowledge of this important aspect of the vocational education and training systems is unsystematic and based, for the most part, on assessments made in relation to specific donor programmes.

There is a clear need to focus specifically on teacher and trainer training. As is the case in Western European countries, this training has to be modernised and this will have to be done at a time when fundamental changes are taking place in the global economy. Capital is becoming ever more mobile on a global scale, production cycles are shortening and modern production concepts are being introduced. The innovative potential of production systems based on information technology is widely recognised but it is becoming increasingly evident that only a fraction of this potential can be realised in the absence of a well-trained, flexible and motivated labour force.

1.1 *Methodology of the study*

This review on needs, achievements and obstacles in the area of training for vocational education and training teaching personnel in the partner countries is based on several components.

a) A study of existing material on vocational teacher training in the partner countries

This involved an analysis of the monographs on vocational education and training which had already been produced by the 12 National Observatories. The reason for this preliminary analysis was to get an overview of the structure and patterns in teacher and trainer training systems in the different countries before starting the study of data collected from each country.

b) Country-specific data

This was based on information provided by the National Observatories, which were given separate contracts from the Foundation to undertake surveys on the training of vocational teachers and trainers in the partner countries. The surveys were based on a common structure/questionnaire, formulated by Bernhard Buck of the European Training Foundation, who was responsible for the contract. The results were sent to the contractor by the National Observatories. The data from the surveys were not been supplemented by telephone interviews or by additional questions. There was so much work involved in analysing the country case studies that it was not possible to include any follow-up procedures. Case studies on teacher and trainer training were received from 12 countries: Albania, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia (FYROM), Poland, Romania, the Slovak Republic and Slovenia. They have been published as "working documents" by the Foundation.

1 Lauzackas, R. et al., *The training of teachers and trainers in Lithuania*. Kaunas, 1998.

c) The cross-country analysis

The cross-country analysis is based on the 12 national surveys and on telephone discussions with Foundation staff.

The national case studies are of varying quality, particularly as far as perspective is concerned. Most of them were written by authors from outside the vocational education and training system and the various aspects of university-based teacher and trainer training are much better covered than the very important issues of the training of trainers and of vocational pedagogy in its own right. Another problem is that written reports alone cannot provide all the information required for a better understanding of the theory and practice of teacher and trainer training. We would also need to interview those involved and to observe concrete instances of vocational teacher training and of pedagogical processes in the classrooms and workshops of vocational schools. The comparative analyses and formulation of needs and recommendations presented here should, therefore, be read with these limitations in mind.

The cross-country review will contain:

i) a comparative analysis of the current situation in teacher and trainer training in the 12 countries, based on the conceptual framework formulated in the annex of the terms of reference;

ii) a description of needs and obstacles in teacher training, including a presentation of examples of best practices, with the author's recent 1½ years' consultancy experience in the "DELATE" project on pre-service vocational teacher and trainer education in Latvia serving as a source of orientation and inspiration;

iii) a number of recommendations on school-company interplay, the pedagogical development of teachers and trainers and new strategies in modern vocational teacher training, which derive from an attempt to integrate into the review the concrete experiences gained by the author in his recent work in this area in the three Baltic countries, with a view to separating myth from reality and coming up with realistic proposals; and

iv) in an annex, short descriptions (4 pages) of the situation with regard to teacher and trainer training in each of the 12 countries, which are extracted from the country case studies and are presented, partly, to provide a broader and more succinct description of the countries and, partly, to substantiate some of the arguments put forward in the text.

The synthesis report has been written by Søren P. Nielsen, DEL, Copenhagen (the Danish vocational teacher training institution), who has many years' experience in documentation and analysis as well as in consultancy work on curriculum development and vocational teacher training.

Two experienced colleagues from DEL, Susanne Gottlieb and Dorte Sørensen, who have also been involved in DEL's activities in the Baltic States since 1993, have taken part in this project and have contributed substantially to the discussions on the challenges facing training for vocational teachers and trainers in Central and Eastern Europe. Susanne Gottlieb has produced the country case studies on Bulgaria, Romania and Slovenia. Dorte Sørensen has produced the country case studies on the Czech Republic, Hungary and the Slovak Republic.

2. A comparative analysis of the current situation in teacher and trainer training in Central and Eastern Europe

Teachers are the key actors in the innovation process. The final outcomes of the reforms aimed at the modernisation and structural change of vocational education and training in the countries of Central and Eastern Europe will depend, to a large extent, on the motivation and competence of the individual teacher who is out there organising learning and teaching processes for students in his or her own classroom. That is why more emphasis must be put on vocational teacher qualifications and all forms of teacher training in the countries involved. In this chapter, we try to identify patterns in the way teacher and trainer training operates in these countries.

From a methodological point of view, it should be mentioned that this cross-country analysis is a secondary study based, mainly, on the case study material produced by the National Observatories. It is not a systematic, comparative analysis using its own research strategy and its own primary data. It attempts to describe and reflect on some of the more salient characteristics of teacher and trainer training and the problems vocational teacher training systems face as these become clear in the wake of the transformation process. Finally, it should be noted that this is a complex area, which, of necessity, is reduced to a number of basic perspectives in a comparative analysis of this kind.

The countries of Central and Eastern Europe are often referred to as a single group, the former "socialist countries". However, although they have much in common, we also find clear differences between these countries, differences which can help explain the broad configurations of their vocational education and training systems and the characteristics of vocational teacher and trainer training in them.

- Three countries, Estonia, Latvia and Lithuania, belonged to the former Soviet Union, which was a centrally governed, one-party state with a centrally planned economy.
- Four countries, Bulgaria, Hungary, Poland and Romania, were wholly independent states belonging to Comecon.
- Two countries, the Czech and Slovak Republics, were constituents of the former state of Czechoslovakia.
- Slovenia and Macedonia were part of the then federal state of Yugoslavia, which differed from the Soviet Union politically, economically and ideologically.
- One state, Albania, pursued a policy of national self-sufficiency and was internationally isolated.

It is clear that the countries of Central and Eastern Europe, which have such diverse historical backgrounds, were different from one another. Nonetheless, they did share many social and economic characteristics. In the first section of this chapter, we focus on phenomena which are common to most of the countries. In the second part, we describe the characteristics of vocational teacher and trainer training in groups of countries, which can be said to share a particular "system logic", and in individual countries.

2.1 *Features common to teacher and trainer training in all Central and Eastern European countries*

A number of factors are common to all the countries of Central and Eastern Europe and have a deep impact on the training of vocational teachers and trainers. In general, vocational education and training issues have a low status in the countries of Central and Eastern Europe. The world of academia is traditionally seen as more important than the world of work. The choice of vocational education is a negative one for many pupils. Although there are differences between countries (there is a stronger tradition of vocational education and training in the Central European countries), vocational teachers often feel that they have to cope with the challenging task of teaching young people who have nowhere else to go.

This situation is aggravated by the changed mission of vocational schools. Because of the closure of many workshops and the reduction of training facilities within enterprises, schools are being forced to take over all vocational education. The result is that vocational education has become more theoretical and costs are increasing. Moreover, the structure of regional employment (which was often dependent on one or a few companies) has collapsed in almost every country. The schools and teachers, which depended on these enterprises for many years, are now facing the question of what the purpose or function of the education they are providing is.

In addition, teachers have, until recently, not been involved in the design or revision of curricula. They have insufficient knowledge of active types of learning and not enough skills in organising them. In all the countries, vocational teachers have been educated to use, and have experience in using, curricula which cannot provide qualifications appropriate to a modern, market economy. Curricula were, and, to a great extent, still are, geared towards narrow specialisation. They have a centralised and prescriptive character which leaves little room for innovation or for taking local conditions into account. The contents have been, and still are, described in detail with a focus on the knowledge to be acquired. This leads to highly formalised and didactic styles of teaching. There is often little or no coordination between general and vocational components, on the one hand, and between theoretical and practical aspects of vocational instruction, on the other.

The social status of vocational teachers and their salaries are generally low in the countries of Central and Eastern Europe. Salary levels have fallen, compared to those of other groups, and teachers normally have more than one (full-time) job in order to maintain an acceptable standard of living. At the same time, the level of professional expertise of vocational teachers, especially those "masters" or practical instructors, has also been strongly criticised in recent years. Many countries have reported a "brain drain" from teaching and training into other jobs, while others have had problems in recruiting new vocational school teachers. In spite of this, most countries report that vocational teachers seem to be motivated and ready for change. The main problem, again in most countries, is seen as too few, and often irrelevant, training opportunities for vocational teachers.

In former times, there was a relatively strong educational support structure in the countries of Central and Eastern Europe, e.g. methodological centres, pedagogical innovation centres etc. After 1989, a severe antipathy towards educational research and development institutes set in. Vocational teachers were among those who demanded that the institutes be disbanded immediately because of their past ideological bias. Many of those employed in these institutes were dismissed and their budgets and numbers were reduced. The removal of politics and ideology from educational research has been a high priority in all the countries. However, the development of new support structures to replace the old has been very slow. The result is that the countries of Central and Eastern Europe do not have efficient support structures today. At the same time, the teacher-organised initiatives to develop teaching through the creation of independent networks among teachers, which were to be found in many countries before 1989, have also vanished.

There are, normally, four different categories of teacher in the vocational education and training systems of Central and Eastern Europe:

- teachers of general subjects, most of whom have higher education qualifications;
- teachers of theoretical vocational subjects, many of whom have also taken a higher education course, although the standard of their pedagogical qualifications, if they have any, varies greatly from country to country;
- instructors for practical workshop training in vocational schools, who can be qualified technicians, skilled workers or have a masters certificate but who usually do not have a course in higher education or any specific training in pedagogy (although, in some countries, "minimum pedagogical" courses are offered to them); and
- instructors for in-company training, most of whom are recruited from among the skilled workers.

While the first two categories of teaching staff may have acquired adequate formal qualifications through higher education, it is being questioned, in a number of countries, whether existing courses in higher education are an appropriate preparation for the specific demands of vocational education and training today.

There are different strands of vocational teacher training:

- initial or pre-service training in training colleges, universities or university faculties which deliver general teacher training;
- continuing/further training in teacher-training institutions; and
- in-service training.

There is an acute need everywhere for more training options and opportunities for practical workshop instructors or "masters".

The availability and organisation of training differ considerably from country to country. For the majority of vocational teachers, there are no natural channels for further training and, in many countries, there is no in-service training. In comparison with teachers of general subjects, vocational teachers do not have many opportunities to engage in postgraduate studies or to carry out research on the methodology of vocational education.

2.2 *Examples of teacher and trainer training – the Baltic States*

As former members of the Soviet Union, Estonia, Latvia and Lithuania share a number of characteristics in teacher and trainer training. Until the end of the 1980s, education, like the economy, was centralised and everything was coordinated from Moscow. Traditionally, all secondary school teachers followed the same study programmes. Although this model continues to play a role today, important changes have taken place in the Baltic States since 1990.

Teachers of the vocational education and training system can be divided into three main groups:

- general subject teachers;
- special vocational subject teachers; and
- vocational instructors or masters.

Teacher training is divided into theoretical and vocation-specific subjects and these are taught separately, the former to teachers of theoretical disciplines and the latter to instructors ("masters").

Teachers of general (gymnasium/upper secondary schools) subjects are university graduates, are highly specialised and usually teach one subject only. Normally, they have studied pedagogy at university, parallel to their subject studies. The importance of this group has grown with the need to provide vocational school students with "double" qualifications, i.e. in both general and vocational subjects. This is because, if vocational schools are to attract young people, they need to offer them interesting options. In Estonia and Lithuania, the general subjects are the same as those taught in the gymnasium, while Latvia has introduced five new vocational-specific, or "dedicated", general subjects as part of the Phare Vocational Education and Training Reform programme.

The special vocational subject teachers have a technical education, for instance as engineers, and have followed courses in higher education establishments. Many of them subsequently take courses in pedagogy through distance learning from university. This group tends to be rather preoccupied with technical issues and cooperates very little with the practical workshop instructors, the masters.

Vocational instructors, or masters, are a large group and have no pedagogical education or training. Often, they are skilled workers who instruct students in practical work functions in the school workshops. The masters badly need training in their vocational subjects, in work processes and in teaching methods. They are, to a large extent, isolated from the rest of the teachers. They normally give 40 lessons a week and are paid less than other teachers.

There are no special institutions offering education programmes for vocational teachers.

The situation in **Estonia** differs from that in other countries, even the two other Baltic States. The country has a small population, 1.6 million, and has to provide vocational education and training courses in Estonian and Russian. As only a small number of vocational teachers are needed each year, no independent institution has been set up for vocational teacher and trainer training and research. Neither is it possible to provide separate vocational teacher training for individual specialisations. The programmes that are provided cover areas that are common to a number of occupations and are often an integral part of general teacher training programmes. The reason why there is no body which is responsible for vocational teacher and trainer training in Estonia is because, for a long period, no vocational teacher and trainer training at all was organised in the country and people seem to have accepted this situation. However, Tallinn Pedagogical University has now started to provide initial and continuing training for vocational teachers.

The level of education of vocational teachers and trainers is a serious problem. The number of teachers with no professional training at all has increased in recent years. People in education are earning salaries well below the national average. Furthermore, because vocational education and training is in an obvious state of flux, there is a tendency towards apathy and unwillingness to change among teachers. The problem of teacher qualifications is, therefore, an important barrier to the development of the Estonian vocational education and training system. Compared to the two other Baltic countries, Estonia has not yet started to reform its vocational teacher and trainer training system. Moreover, links between the institutionalised providers of vocational teacher training and the Phare Vocational Education and Training Reform programme, which has provided important and quite substantial input in terms of new pedagogical approaches, are too weak. Much of the Phare effort in Estonia has concentrated on curriculum development. In the next phase, it will be necessary to give added weight to the challenge of building up an adequate pre-service teacher training system and identifying measures to upgrade the level and quality of in-service training.

In **Latvia**, there is no concept of vocational teacher and trainer training as a distinct and separate issue and no specific policy aims for training vocational teachers have been formulated. It is estimated

that half the vocational teachers have no pedagogical education. A professional teaching qualification can be conferred by a higher education institution only. The duration of studies is a minimum of four years and the period of practical training is eight weeks. No previous work experience is required to become a vocational teacher. Upgrade courses and seminars for vocational teachers are organised centrally. Centres for Vocational Education, among others, organise methodological courses for teachers. Continuing vocational training courses are also offered by higher education institutions. The latest methods in pedagogics and didactics come from various international projects in which competent foreign experts are involved. The teachers trained in these projects act as trainers of other vocational teachers. As far as organised forms of experience sharing and in-service training are concerned, the annual exhibition of teachers work, *"Experience"* should be mentioned. The exhibition includes teaching aids, tests, sets of exercises, exercise-books of practical work etc. and is organised by the Centres for Vocational Education.

Latvia is very much concerned that the organisation of the vocational education and training system should be based on the educational values of the country. Creating a specific teacher-training system for vocational teachers is a high priority. During 1996-97, with the help of expertise from Denmark, Latvia developed a nation-wide, basic pedagogical qualification programme for vocational teachers and trainers. In 1998, a basic teacher training programme, based on a clearly articulated concept of vocationally specific pedagogical education for teachers and trainers, was launched. The programme, which concentrates on developing pedagogical, didactical and psychological competencies, is offered, at post-graduate level, to teachers and trainers who are already teaching in vocational schools.

Another important initiative is the establishment of regional education and examination centres under the Phare Vocational Education and Training Reform programme. These are organised jointly with the Centres for Vocational Education. One of their central tasks will be continuing training for vocational teachers and trainers. The setting up of a Resource Centre to give support to vocational teachers would be another important step forward.

In **Lithuania**, initial vocational teacher training is carried out by the universities which have departments providing programmes for teacher and trainer training. Vocational teacher training is carried out in seven institutions, of which six are universities. Teacher training is offered, either in "parallel" form, i.e. in programmes in which specialist subjects and pedagogical training are integrated, or in "consecutive" form, i.e. in programmes where specialist subjects are studied first and pedagogical training, at either "minimal" or master degree level, is provided afterwards. Training for vocational teachers is linked to the general classification of vocational education and training programmes into 14 groups, although subject-specific teacher training is available in only three fields. Teacher and trainer training programmes are usually integrated into other programmes with the result that most of the lectures are only partly related to teacher training.

There are two forms of continuing teacher and trainer training:

a) higher level studies (MA level and doctoral study level); and

b) vocational adaptation courses, i.e. short courses that allow vocational teachers and trainers to upgrade their qualifications.

Continuing vocational training is carried out at centralised education institutions, typically centres for vocational development or other departments attached to universities.

Integrated, or "parallel", teacher and trainer training will be phased out in Lithuania at the end of the 1990s. The 1998 White Paper states that this kind of training is ineffective and inadequate to the needs of the market economy. A reform of teacher and trainer training is needed to ensure innovation, creativity, constant renewal of curricula and applicability to changing conditions.

Thus, changes are underway in Lithuania. The White Paper argues that the best way forward for teacher and trainer training is consecutive training. Subject-specific qualifications can be acquired in any institution. Initial teacher and trainer training, leading to a teaching qualification, is to be carried out only after teachers and trainers have taken up positions in vocational schools. This training is to be carried out by specially designated higher education institutions. This new concept of teacher and trainer training is inspired, particularly, by the Norwegian experience. The White Paper also points out the need for continuing vocational training for teachers and trainers for 2-4 weeks per year. Interestingly, it is proposed to develop teaching staff qualifications, not only through courses in specialised centres, but also by means of in-service training in the teachers' own schools or colleges. This is regarded as the best way to revitalise teaching methods and to establish new vocational education and training programmes.

2.3 *Examples of teacher and trainer training – Central Europe*

The Czech Republic, Hungary and the Slovak Republic have enough structural similarities to allow them to be grouped under one umbrella. They all have a long history of industrialisation, dual vocational education and training systems and a tradition of well-regulated teacher and trainer training. The way education is still conceptualised in these countries could, perhaps, be traced to their common heritage from the Austrian-Hungarian Empire, but this would be the subject of a separate study.

In all three countries, vocational education and training programmes appear to be relatively popular. The management of vocational education and training, particularly continuing and in-service training for teachers, has been decentralised. The borders between the main types of secondary schools are becoming less marked and the differences between general and technical education less distinct. Technical education is tending to attract more students, but also to become general, while the numbers in vocational education, which has a much lower status, are shrinking. New schemes are being implemented. In the experimental technical schools in Hungary, for example, the programme is divided into two cycles, with the emphasis on general subjects in the first cycle and on vocational subjects, in the second. In all countries, the number of students taking vocational courses leading to higher level certificates is growing and courses with broader profiles are preferred.

The tradition of close cooperation between schools and enterprises for the training of apprentices has been disrupted by the economic crisis, which has had a particularly negative affect on large manufacturing companies. One result is a shortage of places for practical training. At the same time, these countries have adopted a policy of re-establishing links with industry in order to underpin the training process for changing skill requirements. In all three countries, there is a long tradition of training trainers in school workshops as well as in companies. The transition period has brought about changes, first and foremost, in the legal and institutional context but not so many changes have yet taken place in the structure and functioning of teacher and trainer training.

In **the Czech Republic**, there is a strong tradition of vocational education and training. Up to the mid-nineteenth century, the training of apprentices was still tied to the Medieval Guild system. After this time, a form of dual apprenticeship system developed. It is not widely known that more than 80% of basic school leavers in the Czech Republic go on to secondary or vocational schools. The reform of the vocational education and training system, therefore, will have a strategic impact on the development of the entire education system.

Teaching qualifications can be obtained from faculties of education, which are specialised university departments providing education and training for the teaching professions. People can also qualify as teachers by graduating from faculties of philosophy (humanities and social sciences), science, mathematics, physics and physical education. There is a teaching practice period at appointed schools under the supervision of experienced teachers. But there is no precise concept of teaching practice requirements for vocational subject teachers and instructors.

There are three main categories of teachers in vocational education and training schools:

- teachers with a degree from technical, economic or agricultural colleges plus at least four semesters study for a postgraduate certificate in education, with general subject teachers being trained, usually, to teach two subjects and technical teachers, one;
- masters (or trainers/foremen) with four years' apprenticeship training, the Maturita examination and a teaching qualification for specific subjects; and
- instructors, craftsmen with responsibility for instructing students in particular skills, who have completed an apprenticeship and, sometimes, have additional pedagogical training ("pedagogical minimum").

The teaching methods used in vocational education at secondary level still reflect a prescriptive approach to learning. The didactic tradition in teacher training appears to have reinforced this approach. There is no evidence of any systematic pedagogical training for instructors, who were, and still are, apparently expected to learn their training methodology from the masters or vocational trainers. Classical, i.e. frontal, classroom, methods are the most commonly used. Although there are signs of change in the system of initial training for vocational teachers at secondary level, existing programmes do not meet the needs of the schools. Because of the different categories of teachers and trainers and the different ways they are trained, it is difficult for teachers and trainers to form teams that can integrate the different (general, theoretical-vocational and practical) components in the curriculum and set up coherent, holistic learning processes.

Responsibility for the further education of vocational teachers has been decentralised to the local school level and has become demand-led. Continuing vocational training is provided by many different institutions under a new market model. There is no comprehensive system of in-service training for teachers. There is a need to develop an understanding of pedagogical innovation and of local vocational school development and this might direct training towards generally accepted objectives.

In **the Slovak Republic**, we find the same categories of vocational teachers and instructors and, here too, vocational teacher training takes place in the universities or in special faculties for teacher training. Teacher education is delivered either in "parallel" form or in post-graduate courses which are offered by many different institutions. Teacher and trainer training curricula vary widely and it is difficult to identify clear standards. In university-provided training, there is a marked tendency to focus on theoretical and abstract elements, partly because of prevailing scientific and research traditions, which have little relevance for practical problem-solving and, partly, because students are required to produce a theoretical thesis as part of their degree programme. Too little attention is paid to ways of activating students and the lessons appear to be overloaded from the point of view of content. The programme of study for the consecutive, supplementary teacher qualification would appear to remain firmly rooted in traditional concepts of school and schooling. Interestingly, a general, introductory training course for new teachers is organised by the vocational schools themselves. In most cases, a new teacher has a one-year probation period under the supervision of an experienced teacher.

Reforms of teacher and trainer training are currently in the pipeline. These have been inspired, particularly, by the Phare Vocational Education and Training Reform programme.

In contrast to the Czech Republic, continuing and in-service training is regulated by law. Continuing vocational training takes place at the universities and in the sectoral institutes. Most continuing training for vocational teachers and trainers is organised by the State Institute of Vocational Education. Programmes and curricula are approved by the Ministry of Education. A new programme, offering educational staff better opportunities to take qualifying examinations, which, in turn, will lead to possibilities of promotion and increases in salary, was introduced in 1996.

In **Hungary**, there is a relatively well-developed system of short vocational training courses, which has its origins in the German dual model. This model, however, has become less important over the last few decades. In Hungary, vocational secondary schools seem to have more prestige than their equivalents in most other countries. One reason for this is that the Hungarians have strengthened the academic component of education in vocational schools. A World Bank sponsored programme, which started in 1993, encouraged this development and has had far-reaching effects. Additional programmes have been introduced in vocational schools. It is no longer possible to speak of distinct types of schools, but rather of mixed schools, where academic and vocational tracks co-exist. Hungary is also one of the countries where the development of social partnership is most advanced.

A secondary teacher qualification is required for teachers in upper secondary schools and teachers teaching theoretical subjects in vocational secondary institutions. This qualification is awarded at the end either of a five-year university education at one of the five arts and sciences universities or, in the case of vocational education, of specialised undergraduate or postgraduate training at other universities. Most teachers in secondary institutions teach two subjects. In vocational schools, a vocational teaching qualification is required. Most teachers in these schools have a secondary, or higher level, technical or other specialised diploma with supplementary pedagogical training. This group can teach general practical subjects in vocational secondary schools, but they also teach vocational theoretical subjects in the three-year vocational training institutions.

Teacher training is carried out at different types of higher education institutions, approximately 17 of which offer this type of training. Nearly one-third of the teachers are trained in evening and correspondence courses. Students who want to become teachers have to attend pedagogical courses during their studies and to have teaching practice in the university's special practice schools. This part of the study programme is provided by the education departments of several universities. These departments are subject to a lot of criticism because they have little or no contact with either school practice or educational theory. They carry out hardly any research activities. While teacher training in Hungary is normally university-based, there is another kind of vocational teacher training provided on the level of higher education. This is a three-year course which qualifies students to be vocational trainers, but not teachers of theoretical subjects, in secondary vocational schools.

At present, major modifications are being introduced into the study programme for vocational teachers to bring it into line with reforms in the vocational education and training system. This will result in greater emphasis on the pedagogical and psychological aspects of vocational teacher and trainer training. More weight will be put on training in methodology and on teaching practice. Another important initiative is the general policy on continuing vocational training for teachers whereby schools must now spend 3% of their budgets on further training for their teachers. Teachers themselves are expected to pay 20% of the costs.

On the negative side, it would appear that the training of teachers and trainers is still too widely distributed and, at the same time, too weakly connected to educational research and pedagogical development work. Another critical factor is that training is separated from actual work practice.

Even though there is a network of training providers, it is difficult to establish and maintain generally accepted standards of education as the different institutions have a limited number of students.

2.4 *Poland, Bulgaria and Romania*

In **Poland**, there are also three groups of vocational teachers:

- those who teach general subjects;
- those who teach theoretical vocational subjects; and
- those who teach practical vocational subjects.

These groups differ in educational background and qualifications. They also have different social statuses.

Practical teachers are "blue collar", work in training workshops and wear working clothes. Practical training is also given in enterprises and in craft industries. Teachers of general subjects normally come from universities and constitute about 40% of all teachers in vocational education. They obviously lack practical experience and very often also do not have pedagogical qualifications. Teachers of practical vocational subjects are normally trained within the system of Pedagogical Technical Studies.

Practical teachers may also be recruited from those who have completed secondary vocational school and have at least 2 years' work experience or from those who have a senior craftsman certificate plus at least 6 years' work experience. Practical teachers can upgrade their pedagogical skills at third-level education institutions.

The recruitment base and qualifications of teachers show that the provision of vocational education has been quite academically oriented. The qualification structure can also provide an explanation for a number of current problem areas in vocational education and training:

- the constant pressure for upgrading from teaching staff;
- complaints from industry that vocational education is too theoretical;
- the gap that exists, in many vocational schools, between theory and practice; and
- the low level of integration between teachers of theory and teachers of practice.

In **Bulgaria**, vocational education and training can be undertaken in many different types of institutions, each offering a number of courses of different lengths and quality. Vocational education and training is almost entirely school-based. Normally, vocational schools have "production units" in which students work between 180 and 210 hours per year. These units are located within the educational institution and there is little or no participation in teaching by staff from the private sector. Around 32,000 people work in vocational schools. Of these, 60% are teachers and 40% are masters and workers in school workshops and laboratories.

The training of teachers is undergoing complex changes. From an organisational point of view, a single, unified system to select trainees has been set up. Course content and teaching methods, technical facilities, structure and management are also being changed. Under the new system, training is provided in three stages:

- stage one is given over to pedagogical theory;

- stage two, to teaching methods, organisation and management; and
- stage three, to practical applications.

The content of courses has been revised and drastically changed to make them more relevant to the needs of technology and science and to incorporate appropriate aspects of general and cognitive psychology. Particular emphasis has been put on reviewing initial teacher-training programmes so as to facilitate a shift towards more practical and competency-based training.

In **Romania**, teachers of vocational subjects are subject specialists who are university educated. Most of them have been given some pedagogical lectures and have taken courses in didactics and psychology. Instructors are generally craftsmen from industrial enterprises. Normally, these have no teacher training or pedagogical education. Many instructors do not have a background in teaching and almost all of them need retraining to keep up with the rapid changes in the labour market. As yet, there is no formal teacher training for instructors who want to teach vocational subjects. Teaching loads are low compared to European standards. Most teachers are single subject teachers. Instruction and teaching is traditional and teacher- or instructor-centred. Teaching staff and instructors are considered traditional in the approach they adopt to educating students for the modern labour market. In-service training of all teachers and instructors in vocational schools is critical for the success of the reform of the vocational education and training system. Despite the generally conservative environment in teaching and learning, and a structure that hinders initiatives at school level, many teachers are strongly motivated to innovate and to take on new ideas. The Inspectorate is responsible for in-service training for teaching staff and provides this training through the Casa Corpuli Didactica (teachers resource centres). The need to adopt modern curricula and teaching methods is well understood but is difficult to implement because of the lack of resources.

The vocational education and training system is still managed entirely by the Ministry of Education, through the Inspectorate which has offices in each of the 41 counties. The Inspectorate acts as the schools' governing boards, as a support agency, an inspection authority and a funding body. School directors have little autonomy. They are closely supervised by the Inspectorate and are obliged to work within the Ministry's centralised norms. Some measure of decentralisation of the vocational education and training system is currently taking place and this is giving more freedom of action to a number of selected pilot schools. However, school directors will have little chance to develop or demonstrate management skills and competence unless the existing, discouraging system of centralised school governance is changed.

2.5 *Slovenia and Macedonia*

Traditionally, **Slovenia** had a fairly centralised educational policy in which the Yugoslav Communist Party played a crucial role. The earlier, uniform system of education, "Career-Oriented Education", led to great problems in teaching pupils with heterogeneous abilities, interests and occupational aspirations. Furthermore, the system did not appear to prepare students well for developments in the economy. Recent changes in the Slovenian education system have had a great impact on didactic processes and teaching strategies. The trend towards individualism demands a teaching strategy which differs radically from the more or less uniform approach that characterised teaching methods in former times.

The training of secondary school teachers lasts four years. The emphasis is more on academic tuition than on vocational and practical training. Teachers of vocational subjects are employed at vocational schools when they finish their basic course of studies. There are no separate pre-service courses for teachers of technical-professional and vocational-practical subjects in secondary schools. Because their initial training is unbalanced, many teachers of vocational subjects have very little practical experience in the subjects they are teaching. They acquire their professional training through in-service courses in psychology, education and teaching methods. Increasing attention is now being paid to providing training courses and professional support during the first year of teaching and to in-service training. In general, the question of the different profiles, qualifications and skills that are required for teachers of general school subjects, teachers of practical school subjects and trainers has not yet been resolved. At present, the qualification requirements are higher for school teachers, especially those teaching general subjects, than for practical trainers and this could lead to imbalances between the more theoretical and the training components of the programme.

The **Former Yugoslav Republic of Macedonia** is in deep crisis and not only because of the conflict in Kosovo. It is impossible to compare the situation to that of Slovenia, although both states were formerly members of Yugoslavia. Despite far-reaching economic reforms, the recovery in output and employment has been slow. The crisis in the region has led to a 40% decrease in GDP. Much of this is due to the fact that access to traditional markets has become severely restricted. The vocational education and training curriculum does not meet the changed needs of companies operating in a market economy. Current policies focus on the reinforcement of vocational education and training and the search for donors to support reform and modernisation. The Phare programme for the reform of initial vocational education and training is being introduced on a pilot basis in a group of 16 schools. The programme covers curriculum reform, the elaboration of a national strategy for the development of vocational education and training, the training of teachers and coordinators, equipment, partnerships and institution building. There is, however, an urgent need to "generalise" the teacher and manager training component of the pilot school project to all economic sectors and to all vocational education and training schools in the country. The training of vocational teachers needs to be based on training needs assessments. School management needs to be updated. The Ministry of Education also needs management training if it is to tackle such issues as recognition and validation of qualifications and the establishment of assessment procedures. There is also a need for capacity-building in support institutions and to develop counselling structures at schools.

2.6 *Albania*

Albania began the process of building a market economy with a physical infrastructure, including educational facilities, which was regarded as among the worst in the world. Not only is the material basis inadequate: the human resource basis or input to the vocational education and training system is also seriously problematic. Vocational education is traditionally scholastic and academically based. Although vocational education and training courses are school-based, an increasing percentage of time is spent on practical training. The teaching force is unevenly educated: over 50% of primary and intermediate school teachers have only secondary level education. Teachers have often only a weak grasp of what they teach and almost no understanding of modern teaching principles. Nevertheless, there has been some progress over the last ten years.

Universities provide teacher-training courses for teachers at secondary level. Greater attention is now being paid to preparing teachers for teaching. Training institutions for vocational teachers will have to be improved. Some steps have been taken in this direction. A new infrastructure for in-service training for vocational teachers has been set up and initial discussions have been held on

whether a separate structure for pre-service training of vocational teachers should be established. In addition, new teachers for the newly introduced vocational courses for secondary school graduates and for the non-university type of higher vocational colleges have been recruited from the experienced work force. Of particular importance are the Phare Vocational Education and Training Reform programme and the Soros Foundation which run important staff development programmes, including in-service training of teachers and school managers. The roles of teachers and trainers need to be redefined. Albania has no system for training and retraining teachers and trainers and a coherent system needs to be built up.

3. Needs and obstacles in vocational teacher and trainer training in the countries of Central and Eastern Europe

In Western Europe, the pace of change in education has been particularly marked during the last two decades. Vocational education and training systems are being transformed at an increasingly rapid rate. Existing education structures are major economic and sociological systems that have been shaped by pedagogical, social, cultural, economic and structural employment factors. These factors have always been present, but their relative importance has changed over time as has their impact on different types of education provision. Pressures for changes are particularly strong in continuing vocational training systems, followed by initial vocational education systems, because of the close relationship between these and the dynamics of the changing employment situation.

Despite considerable differences between Western European countries, it is possible to indicate some common trends in the evolution of their education systems. In this chapter, we juxtapose the position in EU Member States with that in the partner countries. A broad outline of the key issues that have serious implications for vocational teacher and trainer training in Western Europe is presented. Against this background, we then try to outline the needs and obstacles in vocational teacher and trainer training in Central and Eastern European countries.

3.1 The quest for quality and relevance in vocational education and training

Generally speaking, it could be said that most European education systems have passed from a uniform, "mass education" culture to the "client" stage of educational development, when the issue of quality emerges as a major concern. The citizen is no longer satisfied with the formal right of access to education or with a minimal educational service. S/he expects the school to deliver a professional education service. In the "client" phase, the education paradigm changes from supply-driven teaching to demand-led learning and the latter is likely to be the dominant characteristic of education systems in the years to come.

Education and training systems are increasingly interwoven with the rest of society and are, therefore, subject to similar pressures and trends. There are various factors driving vocational education and training provision towards a service that must satisfy the "clients".

- People are increasingly rejecting the distinctions between products and services, profit and non-profit, public and private, small and large organisations, which were developed in another historical context. Education and other public services, such as health care and public administration, have lost the special, somewhat protected, status they had compared to other

sectors. Broader choices and improvements in the quality of products and services continuously raise citizens' expectations and make them extremely critical of low-quality performance anywhere. It is said that everyone is now in the service business (including vocational education and training providers) and this implies a notion of quality that goes far beyond fulfilling the minimal requirements of the customer (not to speak of the personal interests of the providers).

- Another factor is the changing value systems in society, including growing individualism, as well as growing distrust and tension between individuals, institutions and public authorities. It is increasingly difficult to solve problems and disagreements simply by referring to the general or public interest. Trends like these undermine traditional assumptions of professional autonomy (which used to be prevalent in higher education) and lead to a culture of performance measurements and other forms of external control. In education, one factor leading to distrust, and hence to the demand for control, is the belief that teaching staff, unless they are controlled, will tend to be devoted more to the pursuit of the vested interest of their disciplines, professions and employment situation than to educational needs and the service they deliver to students.
- Citizens are not only becoming more critical but wider choices give them more power and increase their appetite for change, flexibility and custom-built services. This is related to greater complexity and variability in qualification requirements, as well as to decreasing uniformity of life styles and expectations (the de-conventionalisation of modern life styles).
- Educational supply and demand is increasingly complex. In the relatively stable environment of the past, quality in education and training could be attributed, almost entirely, to the inherent abilities of teachers and trainers. Because of the rapidly changing environment, new demands, more complex activities, differentiation and increased customer involvement, these abilities alone are no longer a guarantee of quality.

The changed relationship between teacher and student, which can be described as a "client-service provider" dyad, is a challenge for vocational teacher training throughout Western Europe. Trainee teachers must be trained to meet these challenging demands in a professional manner. This means that the changing role of the teacher and his/her professional identity are themes which should be given high priority in modern vocational teacher education.

In all Central and Eastern European countries, the quest for quality and relevance in vocational education and training programmes has been a particular focus of activities undertaken under the Phare Vocational Education and Training Reform programmes. One important component of these programmes has been the training of school managers, vocational teachers and curriculum designers. A change in orientation can be seen in many pilot schools. Some vocational schools are now on the verge of being certified under the ISO 9000 standard, e.g., two former pilot schools in Estonia. However, these developments are still confined to employees in selected pilot schools. The ordinary teacher and trainer training institutions have only rarely been involved. There is a need in all countries to build bridges between the innovative schools and the pre-service and in-service teacher-training institutions and to "generalise" the experiences of the Phare programmes. Some of the best and most experienced vocational teachers should be given an opportunity to "train the trainers" and to become professional vocational teacher educators within the ordinary structures where they would be in a position to give due emphasis to the new roles of schools and teachers.

3.2 *Decentralisation of control in the vocational education and training system and the increased autonomy of schools*

In all EU countries, vocational education and training systems have been decentralised or "de-concentrated" during the last 10-15 years. Principles such as management-by-objectives have been introduced in a number of countries. Decision-making powers have been devolved from ministerial to school level and vocational schools today are often more oriented towards local and regional stakeholders than towards central ministries. New financing measures and more market-based allocation mechanisms have been introduced, and vocational schools have been given incentives to supply continuing vocational training services, labour market training courses for the unemployed etc., on market terms to the local community. School management structures have been reinforced.

In a number of countries, vocational schools are now delivering services to companies in their catchment areas on a commercial basis. In some cases, schools are not only offering courses but vocational teachers are also involved in developing human resource activities, such as training needs assessments, inside companies, especially SMEs. In some countries, there is a notable tendency for vocational schools to develop into local or regional technology and competence centres offering consultancy support to companies. In other countries, a new trend is becoming evident: vocational schools are developing into centres promoting the creation of "learning regions", covering a given geographical area.

Decentralisation has also given vocational education and training greater didactic "scope", in that teachers have to respond to local circumstances which may give rise to new requirements and open up new possibilities for curriculum planning and development. The roles and responsibilities of the actors have changed almost completely. The ministries define aims, objectives and frameworks whereas the detailed planning of education and teaching is carried out at school level. This change in philosophy has been introduced to support an approach to curriculum content which is dynamic and responsive to changes in the labour market and to open up possibilities for increasingly innovative pedagogical planning in the schools.

Decentralisation requires vocational teachers and trainers to have new competencies. In teacher training programmes, therefore, added emphasis has been put on developing the capacity of new teachers to master educational planning skills, to acquire greater knowledge and mastery of teaching methods and to improve their writing abilities. In some countries, teachers are trained, especially through in-service and continuing training programmes, to function as consultants and as training providers to enterprises.

In most of the Central and Eastern European countries, there is still tension between the centralised decision-making structure (which is often divided among different ministries), on the one hand, and the adaptive and innovative activities of individual schools, on the other. This tension has also impinged on the Phare vocational education and training reform strategy, which was based on a "bottom-up" approach with pilot schools. Because of the lack of vocational training support centres, the experience of the pilot schools could not be disseminated to other schools. Even in the most centralised Central and Eastern European countries, however, interesting innovations are now taking place in this field. Romania, for example, has developed considerable expertise in school-based curriculum design, while a number of vocational schools now consider themselves as partners with industry in the provision of training. In other countries, schools are changing into "Regional Training Centres" and taking part in reconversion and continuing training programmes. In Estonia, Latvia, Poland and Slovenia, for instance, initiatives to transform existing schools into regional vocational training centres are already underway.

3.3 *The paradigmatic change: from teaching to learning, taking responsibility for one's own learning etc.*

Modernity has changed the identity of students and demands that teachers' roles should also be redefined. The cultural contract, in the form of values and shared frames of references, which used to underpin teaching, has all but disappeared from contemporary Western societies. The student body of today is so heterogeneous that it is often difficult to create a common understanding in and around traditional teaching processes. Traditional teaching and traditional teacher-student roles are, in themselves, not enough to allow vocational students to develop the cultural and vocational competencies they need in modern society. Students possess more information and data than ever before. The overriding problem is how to understand the wealth of information and to be able to distinguish the information which is useful. This is some of the background to the paradigmatic shift from teaching processes to learning processes where the student takes on a more active, reflective and responsible role in his/her own learning processes.

During the last two decades, the role of the teacher has been based increasingly on instrumental teaching, and on motivating, coaching and "chummy" forms of relationships with students. It has become more and more apparent that the teaching practices that evolve from this situation tend, on the one hand, to overload the teacher and, on the other hand, to take away the responsibility for learning from the students. There appears to be no alternative to redefining the teacher's role, so that more work and responsibility are transferred to the students. The teaching style involved could be described as an effort to cooperate with the students in the creation of "spaces" where the students are allowed to be "safely insecure". This requires the learning environment to be organised in such a way that the student can react to and reflect on issues and ways of presenting problems in a meaningful fashion. The teacher here has a substantial double function as a consultant and a "devil's advocate", always confronting the students with alternative approaches and interpretations. The pivotal point in pedagogical approaches based on responsibility may best be described as teacher reliability and student responsibility. Teacher credibility is extremely important: the teacher must interact with the students on the basis of his/her professional and personal authority and must function as a "wall", while the responsibility of students is shown through their engagement in the learning processes.

On the basis of this approach, a new "contract" on which to (re)build learning processes could be established. However, clear roles and responsibilities are required: the teacher has a professional-pedagogical responsibility and must accept and actively take on ownership of the learning process, while the students, for their part, have a learning responsibility. The vacuum, which cultural changes have brought about in traditional teacher-centred instruction, is replaced by cooperation and shared responsibility. It is only when the teacher gives up the idea that s/he has a duty to teach so that the students can learn, that the students are, in fact, given the chance to learn how to learn.

In modern vocational teacher training, these ideas are now being fleshed out in practical terms. This is not at all easy as teacher educators, as well as teacher trainees, are used to dealing with more traditional teaching models. In Western European countries, the reforms introduced into vocational teacher training programmes in recent years have been directed at finding a better balance between theoretical teaching, self-study periods and practical teacher training in schools.

In most countries under review, vocational teacher training is provided by universities. It is, therefore, still very academic and has not changed much in recent years. The organisation of the teaching and learning process and the allocation of roles to students, teachers and instructors has been configured in various ways in the different Central and Eastern European countries. In general, however, classroom teaching is still very traditional. Under the Phare Vocational Education and

Training Reform programmes, teachers were, in most cases, given some introductory courses in new methodologies to help them reshape the teaching process. Nevertheless, support and training is still required to design new, cooperative vocational education processes. In principle, all teachers should be given intensive, practical courses. A first step would be to provide extensive training for university staff involved in training teachers. In Latvia, a programme to provide this kind of methodological support to a new pre-service training system for vocational teachers has been underway for the last three years.

3.4 *Teacher teams as a bridge between the individual and the school as a learning organisation*

The concept of the teacher as the process owner who organises learning environments for his/her students can be translated into practice, only with great difficulty, by the individual teacher on his/her own. During the last few years, the concept of the teaching team has become central to the pedagogical debate in Western countries. Vocational schools have witnessed the emergence of a new pedagogical scenario. This has involved a shift from teaching and instruction to a focus on the students' learning processes and on the forms of organisation which best support this kind of learning. Teaching teams are one such form of organisation and can provide, at least to some extent, an adequate response to the new concept of learning outlined above.

As a central part of creating optimal learning environments, team organisation has been developed in many schools. Teamwork has become the organisational answer to a number of pedagogical and cultural challenges facing vocational schools today. It does, however, presuppose a new form of teacher professionalism. A team of teachers is an interdisciplinary group with broad competencies which can organise learning processes and analyse and assess the continuous learning experiences of students.

From the point of view of development, the most promising aspect of team organisation is, perhaps, the fact that the team structure can respond to and support the creation of vocational schools as learning organisations, i.e., organisations that are constantly changing and developing and able to systematise and assess their own learning processes. The transformation of a school into a learning organisation requires the existence of organisational forms which further learning processes. The teaching team, which can collect, process and assess pedagogical experiences, is just such an organisational form. Indeed, the teacher team could be said to represent a functional bridgehead between the learning of students and the learning of the school organisation.

Concrete tools to be used by schools have been developed. The practicality of teacher team organisation is being tested in vocational teacher training programmes in some Western countries. Vocational teachers must be able to function in teams. This is a more or less accepted aspect of the modern teacher profile. It is also a prerequisite to achieving the aim (which is statutory in some countries) of planning learning processes so that the different subjects, as well as theory and practice, are integrated. Finally, teams are a necessary condition for participation in school-based pedagogical innovation and development work.

Teachers and students in the candidate countries are interested in new styles of learning. In most of the countries reviewed, new curricula focus on learning which is independent, self-directed or based on teamwork. Our experience from the three Baltic states shows that there is great willingness to develop the teacher role and to reshape pedagogical practices. There is also a great sense of loyalty in the teaching profession and among teacher educators. However, many resources are required to support this transformation. Achieving it will require external funding and expertise.

3.5 *Theory and practice in modern vocational teacher training*

The general change of terminology in vocational education and training in Western Europe from "qualification" to "competence" is more than just a change of words. Much more emphasis is placed on training in the sense of developing the ability to act. Teachers should not experience a "reality shock" when they start teaching. Concrete and practical teaching assignments should be an integral part of vocational teacher training programmes. All the pedagogical staff in vocational schools are "teachers": there is no difference, in that sense, between teachers and workshop instructors. It is very important that practical vocational teachers can combine workshop instruction with the corresponding vocational subject theory so that theoretical elements can be taught inductively. Cooperation between general subject and vocational subject teachers should also be part of teacher training courses. This would allow better integration of theory and practice and would facilitate efforts to make the teaching of general subjects more relevant to the world of work.

Vocational teacher training uses a whole battery of student-activating methods: group work, project work, smaller self-organised study groups on problems relevant to the teaching of vocational students etc. Nowadays there is much more emphasis on presenting the results of students' work in written reports, which usually describe and reflect on practical teaching issues.

To improve the practical teaching skills of student teachers, vocational teacher education is often organised as a "dual system", where theoretical lectures alternate with self-study activities and teaching practice carried out under the supervision of experienced teachers in vocational schools. At least in the Nordic countries, it has been realised that the vocational teacher training institutions alone cannot take on all the responsibility for the education and training of future teachers. Therefore, increasing emphasis is put on new ways of combining theory and practice. To optimise the effects of practical learning and of the work of practical supervisors in vocational schools, much more weight is placed on specific education programmes "to train the trainers" who are actively involved in vocational teacher training. Experience-sharing meetings between teacher educators and practical teaching supervisors are held regularly, at least in some countries. The aim is to strengthen the linkages between the rule-based, knowledge-based and skill-based components of the learning programme. This type of cooperation is often combined with research and development work, in teacher education institutions, on how to combine explicit, theoretical knowledge with implicit, often tacit and intuitive-contextual, knowledge and skills. In the German tradition, innovative research and development work carried out through "Modellversuche" is the vehicle used to find new combinations of theory and practice in vocational education and training.

In most of the Central and Eastern European countries, there are clear-cut divisions between theory and practice, between classroom and workshop and between the roles and functions of vocational teachers and vocational trainers. This separation between the intelligence of the brain and the intelligence of the hands is very problematic as far as learning outcomes are concerned and it must eventually change. What is needed in vocational training programmes is a new configuration of teaching, learning and work practice, which could help to gradually strengthen the student's individual capacity to move between theoretical-analytical, and more experience-based, intuitive, competencies, as the context requires. This is a very serious challenge to the existing structures of vocational teacher and trainer training in almost all Central and Eastern European countries (and in most EU countries as well). One good way of systematically encouraging the adoption of this integrated approach is to support the efforts of vocational schools to become continuing vocational training providers. The delivery of continuing vocational training to experienced workers from local companies might force vocational teachers to combine theory with the experience and (often tacit) knowledge of adult trainees.

3.6 *Research, development and innovation as a basis for vocational teacher training*

Pedagogical research, development and experimental work play a very substantial role in vocational teacher training, at least in the northern part of Europe. Separate vocational teacher training institutions have been established and they normally undertake some applied research and innovation activities. It is a characteristic feature of the Nordic countries that pedagogical innovation stems, to a large extent, from research and development work carried out in local vocational education and training institutions, in contrast to other European countries, where scientific work by universities carries much more weight.

In most countries, vocational education and training is made up of three components:

a) a practical component, i.e., working techniques;

b) vocational, i.e. specialist subject, theory; and

c) general education, i.e., general subjects.

The three parts have equal status in the overall occupational profile, which the students should have at the end of their training. However, the difficulties lie in developing and shaping the pedagogical approach so that the three components are presented and absorbed in an integrated fashion. To achieve this learning objective, it is necessary to allocate time, space and resources continuously to real experiments in integrated vocational instruction, which, from the point of the learner, allows for close, content-based integration between practical, vocational-theoretical and general educational components.

The field of research and development in vocational education and training is broader than pedagogical, school-related projects. The interaction between school and enterprise, which is of fundamental importance in dual systems, on-the-job learning and the role of the social partners are all major fields of study and are target areas for pedagogical innovation in vocational education and training.

It is important that research and development work is integrated into vocational teacher training programmes, not only in the sense that results are part of the curriculum, but, more broadly, so that trainee teachers become familiar with the procedures and requirements of research and development. The dynamics of innovation in vocational education and training are today based so much on local, school-based, experimental and development work that this must be a central component in vocational teacher training. Consequently, to promote the ability of schools and teachers to innovate and to be capable of undertaking pilot projects, applied pedagogical research must also be undertaken by the institutions responsible for vocational teacher and trainer training. Vocational teacher training institutions should have their own identity and have the institutional capacity, not just to study pedagogical and educational themes, but to pursue broader research issues.

In most of the Central and Eastern European countries, vocational teacher training is carried out in too many institutions, normally universities, and, typically, as a supplementary pedagogical course to other programmes. Vocational teacher training is, therefore, very thinly spread. Furthermore, it is not well supported by complementary research and development work focusing on teacher training and vocational training pedagogy. In general, much more vocational training-oriented research and development capacity than is currently in place will be needed. This would also have the function of informing vocational education and training actors about ongoing debates in EU and OECD countries and the researchers involved should be able to participate in international research and

development activities. A future-oriented vocational education and training system cannot do without investments in research and innovation. The national ministries of education should provide earmarked funds and create opportunities for those involved in research and development (vocational schools included) to compete for such them

3.7 Coping with the requirements of lifelong learning

The concept of lifelong learning has been formulated as a response to the requirements of the current stage of development of post-industrial society. Its main aims are the promotion of adaptability and flexibility. The focus is on innovation and initiative as well as on quality, problem-solving, teamwork and networking, at the level of both enterprises and the individual worker. The change in focus from previous concepts of lifelong learning is the result of changes in the economic and social context. Learning outside the education system, on-the-job training, recognition of prior work experience and, in particular, the merging of work and learning are major areas of current concern. Putting this concept of lifelong learning into practice would require fundamental changes in education and training. The formal education system, as we know it today, creates the necessary foundation for lifelong learning, but it is only part of it. Not only forms and methods, but the very purpose of initial education and the role of the school will have to change. The gradual implementation of the concept of lifelong learning would lead to the greatest transformation the education system has experienced to date.

The changes that are crucial for developing a system of lifelong learning are open pathways in education and a recognition of informal learning. The development of national qualification standards and the use of modular approaches are especially supportive of this. Most Western European education systems are still ill-equipped to provide these, though, in most EU countries, major changes in this area are currently underway. A change of perspective towards lifelong learning will, of course, have profound implications for the organisation and content of vocational teacher training.

Most Central and Eastern European countries have not yet succeeded in extending the reform of initial vocational education and training to the reconstruction of their adult education systems. Reforms in these two areas have often been funded from different international sources, with Phare focusing on initial vocational education and the World Bank on retraining and adult education. There are no clear, comprehensive, national policies on reform of vocational education as a whole and this explains why reforms in one subsystem have had hardly any positive effects on the other. However, both for financial reasons and because of the need to develop a system of lifelong learning, the authorities may soon have to review existing positions and responsibilities. Hungary, for example, has recently invited the OECD to review its education system from the perspective of lifelong learning.

4. Recommendations for the renewal of teacher and trainer training in the countries of Central and Eastern Europe

Vocational teachers are the key actors in the renewal and updating of vocational education and training in any country. All over Western Europe, countries are trying to adapt and modernise vocational teacher training in order to keep up with the dynamic pressures stemming from global and technological changes in industry and commerce. There are no ready-made blueprints to guide this process and the partner countries are not alone in trying to cope with uncertainty.

While there is no specific model in vocational teacher and trainer training to be offered, a number of preliminary recommendations can be made.

a) Developing a new concept of vocational teacher and trainer professionalism

The de-ideologisation of teacher and trainer training in most Eastern European countries, including the closure of vocational and educational support institutions in the wake of the post-1989 transformation, has been necessary but has also had negative effects on teacher identity. This has been compounded by the relatively low social prestige and salary levels of teachers. Vocational teachers have too many jobs, are over-worked and have lost their former social position. More should be done to build up a new concept of teacher professionalism so that teaching can be made more attractive again. Added emphasis on "teaching as a profession" is an important theme which should be further developed in teacher and trainer training institutions. To get the priorities right, the partner countries must start to reflect on this challenge. Teachers are not only transmitters of technical or commercial skills: they also have a central role in the socialisation of young people.

b) The polarisation of vocational teacher and trainer training

The fact that the provision of pedagogical qualifications is divided between university-trained teachers of theory and "masters"/trainers/instructors, who, often, have no pedagogical training at all, is problematical. While the level of education of vocational teachers is high in almost all the countries, their pedagogical training seems to be too academic and traditional and is not linked to the world of work. Almost everywhere, there appears to be a lack of awareness of the fact that the primary social function of vocational teachers and trainers is to produce not "teaching" but the "qualifications" needed in a modern economy. The qualification needs of companies require competent workers who are capable of combining theory and practice.

What is needed in the vocational education and training system is a configuration of teaching, learning and practical work exercises. This framework might help to gradually strengthen the individual student's capacity to move, as the context required, between a theoretical-analytical

competence and a more experience-based, intuitive competence. The achievement of this type of configuration poses a very serious challenge to the existing structures of vocational teacher and trainer training in almost all the partner countries (and in most EU countries as well). A good way to further the development of this integrated approach is to support vocational schools' efforts to become continuing vocational training providers, which not only provide reconversion courses but which engage proactively in providing training in new competences. The provision of continuing vocational training to experienced workers from local companies is conducive to the continuous qualification of vocational teachers as courses of this kind require teachers to combine theory with the actual workplace experience of their adult course participants. These activities should have immediate spill-over effects on initial vocational teaching. Teacher and trainer training institutions could benefit in a similar way from the provision of continuing training to teachers in vocational schools (cf. point i).

c) *The trainer/"master" group – low qualifications in pedagogy and technology*

The lack of pedagogical and up-to-date vocational qualifications of the "masters" is a serious problem for vocational schools. In a transition phase, where the old links between schools and the companies have broken down, trainers are important role models for young people who opt for working with their hands when they leave compulsory school. The *"Meister-lernen Paedagogik"* (Apprenticeship) is built on two core phenomena: *identification* and *imitation*, both of which have content-related and methodological implications. The apprentice identifies with the "master" and having this role model is part of his/her training. The narrow vocational learning process typically takes place as an imitation of what is done by the experienced master until the specific work function is "mastered" by the apprentice. Whether work functions are performed in companies or in school workshops, such activities are normally holistic and contain good opportunities for learning how to plan problem-solving, to anticipate results etc. This means that active problem-solving and feedback are a central and genuinely integral element of the learning process.

Now that modern companies are not seriously involved in training and the dropout rates of vocational students are increasing, more should be done to qualify the masters to play a central pedagogical role in vocational education and training. A group of "practical vocational teachers" should be created so that the sharp division between vocational theory teachers and vocational practice trainers can be bridged.

d) *Many teacher and trainer training institutions but no specialised centres of excellence*

Very few specialised, separate vocational teacher training institutions exist in the countries of Central and Eastern Europe, although Latvia and Lithuania may be on the verge of introducing such structures to provide pedagogical qualifications for vocational teachers. Vocational teacher education tends either to be integrated with general teacher education or to be a sub-speciality in other university programmes. At the same time, there are (too) many institutions delivering vocational teacher training in most of the countries, often under different ministries. This has a negative effect on the development and systematic accumulation of vocational education and training expertise and on research and innovation. There is also a lack of didactical thinking on vocational subjects which need institutional "homes" and can best be developed in centres of expertise. Some institutional concentration would, therefore, be advisable.

e) *Weak vocationally specific subject theory in vocational teacher and trainer training*

In all the partner countries, the traditional way of teaching divides the comprehensive learning process of the learner into the teaching of theoretical and practical subjects. The content of the old curricula was (and mostly still is) systematically broken down into small basic units and terms which can be learned separately. The content and goals of basic technological subjects are described, for the most part, via the basic laws of the natural sciences in their relation to basic technology. This is not useful for an understanding of the work process since teaching methods are not related to learning how to solve practical problems.

There is a need to devote more attention to the development of the content of the vocational subject in its own right. Vocationally specific subject theory is underdeveloped in almost all partner countries. The connection between learning and work is often reduced to irrelevant theory or unreflecting "doing". In teacher and trainer training, there is a lack of focus on knowledge of work processes, on job configurations in companies, on job analysis and on how learning takes place on the job. In this regard, there is an urgent need, not only for an overall reform of teacher and trainer training, but also for the intensive further education of teachers. Teachers should not only have academic qualifications and practical real-life work experience; they must be trained to convert this experience into their teaching concepts. Teachers should understand the organisation of workshops and be familiar with the work environment in real companies and how it is likely to develop. Only then can they bring the student's learning closer to the world of work. Basic (and also further) training of teachers should be geared more towards cooperation with regional companies, and be based on an understanding of the needs of modern work processes and on the practice of modern learning processes.

f) *The paradigmatic shift in terminology from "teaching" to "learning"*

The change in conceptual emphasis, in recent years, from "skills and knowledge" to "competence" is more than just a change of terminology. Much more emphasis is now placed on the ability to "act". The shift from teaching to learning and to taking responsibility for one's own learning is necessitated by the increased demand for personal competencies in modern industry and commerce. New qualifications cannot be acquired simply through the introduction of new learning content. They require, above all, the implementation of new learning methods. Change, in most EU countries, is also necessitated by the problematic relationships between teachers and students in traditional classroom settings. Modernity has changed the identity of students and requires a redefinition of teacher styles and roles. The cultural contract, in the form of shared values and frames of reference, which used to underpin teaching, can hardly be found any longer in Western countries. These tendencies are visible, but only to some extent, in the partner countries but signs of dissatisfaction show up as a big increase in dropout rates. At the same time, the cultural and vocational competencies needed by vocational students in modern society cannot be developed only through traditional teaching and in the traditional teacher-student "stage setting".

In vocational teacher training in the partner countries, more emphasis should be put on the concept of the teacher as the "process owner", organising the optimal learning environment for students. It is extremely difficult for an individual teacher to organise this: it must be done by a team of teachers. Teacher training should concentrate on the theoretical and practical development of a new pedagogical scenario: from teaching to a setting where the focus is on the students' learning processes and on the forms of organisation which support this learning. We know, from the experience of the Phare Vocational Education and Training Reform programmes, that teachers and students are, indeed, interested in the new styles of learning demanded. In most of the countries

reviewed, new curricula, developed in the Phare pilot schools, are focused on independent learning on an individual basis or in teams.

g) Theory and practice in pre-service teacher and trainer training

The content and organising principles of pre-service vocational teacher training need to be modernised. New combinations of theory and practice seem to be needed. More practical teaching exercises are needed to develop hands-on experience and to avoid the "reality shock" experienced by new graduates from university. Experiments with some form of a dual system of vocational teacher training should be promoted with periods of theoretical pedagogical studies alternating with periods of practical teaching of real vocational classes in vocational schools under the supervision of an experienced teacher. But this will require the latter to professionalise their advisory role. It is recommended that programmes be set up for would-be teaching practice supervisors in order to renew and give added value to the theory-practice relation in teacher training. This strategy would kill at least three birds with one stone:

- it would force vocational teacher educators to establish close contacts with teaching practice supervisors at the schools and to concentrate their minds on the practical relevance of what they teach;
- it would make vocational schools co-responsible for the qualification levels of their teaching staff; and
- it would contribute to an increased awareness of vocational pedagogics in the vocational education and training system at large.

h) Reforming the teacher training curriculum

The existing teacher and trainer training curriculum will have to be changed if appropriate learning environments are to be created. Learning environments are created, essentially, by teachers and are thus dependent upon their creativity, their views on teaching and learning and their understanding of how to create a problem-solving environment in the classroom. Because the teacher's role and skills are so central to the learning environment, the initial training of vocational education teachers and the continuing training offered to practising teachers are crucial. Many current teacher education programmes in universities and in other higher education and training institutions are out of date. To concentrate on updating these teacher development programmes would have a positive, multiplier effect on the entire vocational education and training system.

Teacher training methods need to focus more on the outcomes for learners in the form of a demonstrated competency. Such a competency is more likely to emerge if experimental learning methods are used. If the learning environment is more active and project-based, learners are more likely to develop the deep understanding of vocational concepts and skills, which is required in a rapidly changing economy. This transfer of knowledge and skills is more likely to occur If the teacher training curriculum is based on solving problems similar to those experienced in the world of work.

i) Continuing teacher training should be closer to vocational teachers

The dominant model for continuing teacher and trainer training is still supply-based: institutions such as universities, faculties, methodological support centres etc. offer training courses to vocational schools either free of charge or on market terms. Existing provision procedures are only partially successful. Continuing vocational teacher training, in particular, is still focused on

individuals rather than groups, and does not include institutional and organisational development. The risk is that it will turn out individuals who, metaphorically speaking, return from their cultural island to a resistant mainland. More emphasis should be put on demand-led training provision close to, or within, the schools.

Pilot projects should be supported where, on an experimental basis, selected continuing vocational training institutions start the training process by going to the vocational schools and, together with teachers and headmasters, defining their actual training needs.

Training needs assessments are still not carried out in most partner countries. Action-learning principles should be applied and on-the-job learning, supported by external consultancy and the training of teachers and trainers in groups or "teams", should be introduced. Genuine partnerships between training providers and vocational schools would, probably, then emerge. Feedback mechanisms would allow these experiences to be channelled back as important inputs to ordinary teacher and trainer training programmes.

j) "Grass-roots" innovative development work as a vehicle in teacher training

It is a characteristic feature of the tradition in the Nordic countries that pedagogical innovation starts, to a large extent, from research and development work in local schools. This contrasts with other European countries, where scientific approaches weigh far more heavily. Local development projects, as an element in a strategy for pedagogical renewal, are decisively important in the Nordic countries, and not least in Denmark. This development model is also found in Germany. The German "Modellversuche", of which there are two types, one for schools and one for companies, are based on the same principles. The idea that content-related and pedagogical development must be based, largely, on giving schools and teachers as free a hand as possible and backing them up with state funds without rigid control has great innovative potential.

It would be worthwhile to try out this strategy in the partner countries too. The Phare Vocational Education and Training Reform experience demonstrates that schools and teachers are very motivated to participate in school-based pilot projects. One advantage of local research and development projects is that the pedagogical development of content and methods goes hand-in-hand with organisational development and the renewal of teacher qualifications. Pedagogical innovation, organised as experimental project work, must, of course, be an integral part of the vocational teacher and trainer training curriculum. But it is also a powerful instrument for developing individual vocational schools.

k) The retraining and upgrading of skills of vocational teacher educators

On the basis of the author's own experience in the Danish-Latvian vocational teacher training programme (the "DELATE"-project 1996-97[2]), there is no doubt that a systematic effort to train the teacher educators is a crucial condition for achieving the 10 points already mentioned. To renew teacher and trainer training programmes, specific training must be offered to the teacher educators who will have to function as agents of change. Seminars and training packages should encompass such subjects as:

- new learning processes and changed teacher roles;
- methods of activating students;

2 Harrebye, J.B. et al.: *DELATE – building systems for a basic pedagogical education of vocational teachers in Latvia, a joint DEL-Latvian teacher education process.* Volumes One and Two. DEL, Copenhagen. May 1998.

- observation of teaching and feedback;
- school-company links in teaching and learning;
- qualifications and competencies;
- evaluation as a tool;
- the development of a school culture etc.

In programmes to upgrade the skills of experienced teacher educators, the pedagogical methods employed and the learning environments established must be organised so that student-motivating methods are employed and the participants are encouraged to create and develop their own future teaching materials. The objectives, structure and methods of one such systematic retraining programme for experienced teacher educators are documented in the "DELATE" reports.

Annex: Country Sections

Albania
Bulgaria
Czech Republic
Estonia
Hungary
Latvia
Lithuania
Former Yugoslav Republic of Macedonia
Poland
Romania
Slovak Republic
Slovenia

The cross country analysis, which precedes the summaries, is based on fuller versions of the case studies organised by the National Observatories of the countries listed above. The complete case studies can be obtained from the publications department of the European Training Foundation.

Teacher and Trainer Training in Albania

1. Information on Albania

- Albania has a population of 3.28 million people.
- Albania is the only country in Central and Eastern Europe classified as a low-income country. It has a GDP per capita of USD 670 in 1995, according to the World Development Report.
- Registered unemployment was approximately 14% in 1997.
- The national budget, in 1997, was 125 billion Leke. Approximately 10% of the budget is spent on education, 3-4% on vocational education and training.
- Participation in vocational education and training has declined because of the increasing numbers of students in general education. Total enrolment in secondary vocational schools declined from 79.4% in 1990, to 44.3% in 1992 and to less than 30% in 1995. During 1995/96, nearly 80% of secondary students attended general secondary education schools, while 20% attended vocational secondary schools.
- Dropout and repetition rates during the compulsory years average between 2.5% and 8% (1995).
- The length of compulsory education is eight years.

2. *The system of initial vocational education*

After the 8th school year, pupils can choose among three main types of secondary school:

- secondary vocational school (3 years);
- secondary general school (Gymnasium) (4 years); and
- secondary technical school (5 years).

A flexible structure, organised on two levels, has been introduced recently: three-year courses for the training of skilled workers; and 5-year courses for technicians and for students who hope to enter higher education.

Public vocational schools are structured on two levels:

- the first level lasts 2 or 3 years and trains qualified workers in all specialisations; and
- the second level lasts 5 years (after the 8th grade or 3 years after the 10th grade) and trains specialists capable of working in and managing different enterprises.

First level public vocational schools carry out vocational training of a clearly practical nature.

Vocational education and training is traditionally scholastic and academically based (the "school model"). Vocational training courses are school-based, but an increasing amount of time is spent on practical training.

The vocational education and training system has no sub-levels. There is no basic vocational training for those students who have not completed lower secondary levels. Neither is there any dual system (apprenticeship). There are no post-secondary vocational schools (colleges). The vocational education and training system is still centralised.

3. *Teachers and trainers in vocational education and training*

There is no separate training system for vocational teachers/trainers and no pre-service teacher training system in Albania. At the same time, very little statistical information is available on vocational teacher and trainer training. The Ministry of Education is the authority responsible for the organisation, management and supervision of the training of teachers for vocational education, whereas the Ministry of Labour is responsible for the training of teachers for labour market training.

The lack of pre-service teacher and trainer training, which would give trainees some psychological and pedagogical preparation for their jobs as teachers, makes it difficult to introduce new teaching methods and to tackle the prevalence of a conservative and traditional (teacher-centred) approach to teaching and instruction.

There are two groups of vocational education and training personnel: teachers and instructors (trainers). Vocational teachers, who teach theoretical subjects, are university graduates: engineers, economists, agronomists etc. They are appointed by the Regional Educational Directory immediately after graduation or when they have worked for some years as specialists in their fields.

The number of teachers in secondary education (general and vocational) in 1997-98 was approximately 6,000, of whom 3,160 were women. This is a huge reduction fall from the 1991 number of 9,700 (2,300). A tentative estimate by the Albanian Ministry of Education and Science puts the numbers of educational staff in vocational schools in 1998 as follows:

- teachers teaching general vocational subjects, 482;

- instructors (trainers), 338; and
- auxiliary staff, 290.

The falling number of teachers in vocational education and training reflects the falling number of vocational schools as well as the decrease in attendance at vocational, particularly agricultural, schools. Many talented teachers have left the school sector since 1991.

4. *Teacher regulations*

Teacher training is regulated by the Ministry of Education. As there is no formal system of pre-service teacher training, vocational teachers have very limited practical experience, but are well versed in the technical concepts of their professions. Instructors (trainers) are involved in training practice and are also appointed by the Regional Directory. In general, they are good professional workers who have completed secondary level education (general or vocational). They have no pre-service or in-service pedagogical training whatsoever. Although they are very competent in the manual skills of their professions, they are far removed from the latest developments in technology and work organisation. In short, apart from university degrees for teachers and the Maturita diploma for instructors, there are no qualifications required to work as teachers or trainers in Albania.

5. *Education of teachers and trainers*

The system of teacher and trainer training, as part of the public education system, is supported from the state budget. Most of the expenditure on vocational teacher and trainer training is believed to come from foreign donor support.

The "Teacher and Principals Training Department" in the Institute of Pedagogical Studies is responsible for national teacher training programmes (but only one person in this department deals with vocational teacher and trainer training). There are no specific establishments for teacher and trainer training. The Regional Education Directory has the important task of organising in-service teacher and trainer training. It does this through its inspectors and the training provided is based on the "annual qualification programme" developed by the Institute of Pedagogical Studies. The inspectors organise and manage training courses. They have no special qualifications in teacher and trainer training, but have been teachers for many years. The content of the courses is oriented towards psychology and didactics, human rights etc. Courses are delivered during the holidays, on particular days (12 days in total) and spread over one year. Participation in these courses is not obligatory. The teachers that take part in the full one-year programme are given a certificate (recognising presence, not achievement) which does not affect their pay but which may give them a better position at work. Teacher salaries depend on length of service. Instructors/trainers do not take part in this teacher qualification system.

Because there is no pre-service training for vocational teachers, universities are not involved at all in the provision of training for vocational teachers and trainers. There are no links between the Institute of Pedagogical Studies and the different university faculties that are involved in teacher training. No funds are available from the Ministry of Education to support the publication of materials for teacher and trainer training but some limited materials are made available through the support of the SOROS foundation and the GTZ.

In-service training for vocational teachers and trainers is provided in the form of different kinds of initiative.

For teachers in schools without foreign support, these include:

- seminars in which Albanian specialists present different aspects of teaching methods and explain foreign models;
- open lessons, where experienced teachers, who have been promoted to a higher level, share their experience with colleagues; and
- individual studies.

For the teachers in pilot schools, they include:

- seminars and workshops (organised in Albania and other Western countries);
- study tours to vocational and technical schools abroad;
- open lessons; and
- individual studies.

5.1 Teacher training needs in Albania – a case study

In 1998, teachers and trainers in 15 vocational schools (not including pilot project schools) were asked about their training needs (by questionnaire). These represented 1/3 of all vocational teachers and instructors in Albania. The results are as follows:

- none of the respondents had any psychological or pedagogical pre-service training;
- none of the practical instructors were involved in formal in-service training;
- most of the people asked considered the actual in-service training insufficient; and
- all expressed the need for training in 3 main directions – general pedagogy, teaching methods in vocational education and training and the latest developments in their own professions.

The survey also showed that vocational teachers and instructors had difficulties in their relations with students. Furthermore, many new teaching methods were still unknown to the teachers, or were partially known but not used by them.

6. Links between teacher and trainer training and the labour market

Since they do not have contacts with the world of work, teachers and trainers have only limited possibilities of finding out about new developments in their professions. Links between vocational education and training and the labour market in Albania are very weak. It is extremely difficult to find enterprises where students can find placements or work practice that fits in with school curricula. Another problem is that, after graduation, practice teachers tend to lose contact with the production sector. There are no links with the social partners, which makes it extremely difficult to develop new assessment and certification systems.

7. Development of vocational teacher and trainer training

Since the early 1990s, there has been no reform in vocational teacher and trainer training in Albania: the reform efforts have been directed at vocational education in general (i.e. the development of a new structure and new content).

Foreign organisations and support programmes have played, and continue to play, an all-important role in vocational teacher and trainer training, e.g. projects under the Phare Vocational Education and Training Reform programme, the GTZ (Germany), the SOROS Foundation, Swisscontact, Scotvec and Kulturkontakt (Austria).

The challenge is that teachers teach only theoretical vocational subjects and that this is separated from training practice (except in some pilot schools which have a modular system). In general, teachers are well qualified, as far as the technical concepts of their professions are concerned, but it is very difficult for them to ensure that their teaching meets the needs of the market economy and the qualification requirements of modern enterprises.

The Vocational Education Department of the Institute of Pedagogical Studies in Tirana has recently put forward an interesting proposal that the entire system should be totally restructured in a way that would decentralise and completely modernise the training of vocational teachers and trainers.

Teacher and Trainer Training in Bulgaria

1. *Information on Bulgaria*

- Bulgaria has a population of 8.283 million people.
- The unemployment rate is 15.9% (March 1999).
- The youth unemployment rate (15-24 year olds) is 33.8% (March 1999).
- Participants in initial vocational education and training represent 28% of all students in secondary education (1997).
- The dropout rate of vocational students is 4.0%.
- There were 18,563 vocational teachers in 1997/1998 and 18,171 in the 1998/1999 school year.
- The length of compulsory education is 10 years (including vocational school for some students)

Vocational education and training, which is a national, centrally managed system, is still in a process of reform. The current legal framework does not take into account the conditions of the market economy, but concentrates mainly on the reform of vocational schools. The main challenges include the development of a coherent legal framework on vocational education and training and the enhancement of institutional capacities.

2. *The system of initial vocational education*

According to the Law on School Education (1991) and the most recent amendments to it (i.e. since 1998), initial vocational education in Bulgaria is delivered in the primary, secondary and post-secondary education system.

- Basic vocational education is acquired in basic vocational schools and leads to the first and second levels of qualification. The length of training is 1, 2 or 3 years, depending on the complexity of the profession and the age of students. The minimum age is 13.
- Secondary vocational education is acquired in secondary vocational schools, the length of training is 3 years and leads to the first and second levels of qualification. Professional gymnasia (from IX to XI or XII grade) and secondary technical schools provide training for a period of 4-5 years, leading to the third level of qualification.
- Post-secondary vocational education (including at higher education technical colleges) is delivered within the structure of the secondary education system, in former technical schools or in independent state and private post-secondary vocational schools.

The three levels of qualification are laid down by law.

- The first level is acquired on completion of basic education or several grades of basic education plus some secondary education. The graduates have the right to exercise the occupation they have been trained for, which involves non-complex and routine activities.
- The second level is acquired on completion of the 10th grade in general secondary schools and of vocational training. The graduates have the right to exercise the acquired profession, which includes complex vocational activities.
- The third level is acquired on completion of vocational education. The graduates have the right to exercise the acquired profession which includes complex activities as well as executive and managerial tasks.

Vocational training is delivered in professional gymnasia, technical schools, vocational schools and centres for vocational training, separate classes in basic schools and in general secondary and special schools.

According to the draft vocational education and training law, initial vocational education and additional vocational qualifications can be acquired in the framework of five different programmes, lasting from 1 to 6 years.

Vocational education in Bulgaria is predominantly theoretical and practical training is limited. The draft vocational education and training act provides for the establishment of a National Agency for Accreditation. There is a general decrease in enrolment in education (as a result of the decrease in the number of children); in 1997, 199,997 pupils were enrolled in vocational education and training and 146,366 in general education.

3. *Teachers and trainers in vocational education and training*

The number of teachers in vocational education and training schools in the 1997/1998 school year was 20,764.

There are three types of vocational teachers in Bulgaria:

- teachers of general subjects who are required to have teaching qualifications;
- teachers of special subjects who are not required to have a pedagogical education but of whom 81% do, in fact, have a formal teaching qualification; and
- practical tutors and trainers for whom pedagogical education and training is, apparently, not required.

Of the total number of teachers in vocational education and training schools for the 1997/1998 school year, 81% had a degree in education, 17.7% had other third-level education and 1.4% had second-level education.

4. *Teacher regulations*

Teacher training is regulated by the Ministry of Education. The Ministry is currently drafting a new vocational education and training act.

According to Instruction No. 2 of the Ministry of Education and Science (Instruction, 1994), the position of "teacher" in vocational and pre-vocational subjects can be occupied by a person who has:

- graduated in a required vocational area and speciality and been given permission to teach;
- graduated in a required speciality in education in the vocational area of engineering;
- graduated in a required vocational area and speciality;
- post-secondary education in a required vocational area and speciality; and
- post-secondary education in a required vocational area and speciality and been given permission to teach.

Instruction No. 2 does not regulate in detail the correspondence between the specialist qualification acquired in higher education or the post-secondary system and the subjects taught. That depends on the specific curricula and syllabi of the vocational school.

Order No. 5 of the Ministry of Education and Science (29 December 1966) sets out the level of post-secondary vocational qualifications required by teaching staff.

5. *Initial teacher training*

Initial education and the improvement of teachers' professional qualifications are provided within the higher education system (universities and colleges).

There are two types of study at university:

- state-funded basic courses; and
- self-financed courses for which students pay fees determined by the state budget.

College education is self-financed in most cases and it is here that the trainers (practical tutors) for vocational schools are educated. Teachers of general subjects are educated at universities or higher education institutions. At technical universities, students can follow a teacher-training course for 3 or 4 terms after the completion of their first year. They can also do it at the end of their course of studies. The course lasts 8 terms (including teaching qualification elements lasting 405 hours).

The curriculum includes:

- pedagogy (60 hours);
- psychology (45 hours);
- audiovisual and information technology (15 hours);
- methodology of teaching (60 hours); and
- additional optional subjects.

It also includes teaching practice, which is made up of:

- school visits (observation and analysis) (30 hours);
- current teaching practice (observation and lessons) (45 hours); and
- pre-diploma probation (trainee teacher give their own lessons) (75 hours).

6. *Continuing education and training*

Continuing vocational training programmes for teachers and trainers are provided at three levels: school, regional and national. Participation of teachers from vocational schools in continuing/further education is voluntary. Basically, further education is provided by universities, which offer programmes:

- to enhance the teacher's professional competence;
- to meet the professional needs of the teaching staff; and
- to introduce European trends and developments in modern pedagogy.

Teachers may enhance and broaden their qualifications in the framework of formal education (through courses organised by the schools), informal education (through courses offered by different centres, associations for the promotion of knowledge, private firms, societies etc.) and international programmes (through projects being implemented in Bulgaria).

The main ways of improving the qualifications of teaching and managerial staff in the education system are laid down in Order No. 5 of the Ministry of Education and Science. They are:

- complex courses lasting for at least 3 weeks and providing theoretical and practical training on concrete items and in certain functions;

- thematic courses lasting for a maximum of two weeks and consisting of theoretical and practical training on a specific vocational (educational) problem;
- instructive courses lasting for a maximum for one week and consisting of the presentation of, and training in, new syllabus content, specific teaching functions etc.;
- vocational specialisation in education;
- specialisation in a certain scientific area;
- training designed for the acquisition and development of specific vocational skills; and
- seminars, internships, workshops, conferences etc.

One of the elements in the system of teacher and trainer training (including training for teachers and trainers in the vocational sector) is in-school qualification. According to the legislation (The Labour Code, Chapter XI), in-service training is provided on the basis of an annual plan prepared by a committee, headed by a school principal and including representatives of teachers' trade unions. The plan is discussed and adopted by the School Council and, once it is approved by the principal, it becomes obligatory.

Order No. 5 of the Ministry of Education and Science of 29 December 1966 also sets out the opportunities for the post-secondary, further qualification of teaching staff. Depending on the level of vocational competence they have achieved, teachers can apply for admission to one of the Institutes for Upgrading Teachers' Qualifications (in Sofia, Varna or Stara Zagora) where vocational qualification levels can be obtained as follows:

- the 5th, and lowest, level is open teachers with at least 4 years of teaching experience, is based on a final, oral examination, but can be awarded, without an examination, to teachers who have long-term teaching experience and whose students have performed well, in terms of knowledge and skills, in different national and international competitions;
- the 4th level can be acquired by applicants who have already been granted the 5th level on the basis of a written examination in an educational problem area that the applicant deals with at work;
- the 3rd level is granted to teachers who have already reached the 4th level and who have successfully completed a 1-year specialisation course in education in Bulgaria or abroad;
- the 2nd level is open to teachers who have acquired the 4th level and is awarded on the basis of obligatory, analytic project work; and
- the 1st level is granted to teachers who have already reached the 2nd level and who have carried out successful, innovative research and development work.

The procedures for conferring qualifications at each of these levels are determined by a Commission, set up by an Order of the Director of the Institute and headed by a professor or an associate-professor, working in the area in question.

7. *Development of vocational teacher training*

Although efforts are being made to decentralise the system, it is still very centralised. Vocational education and training is not on the public agenda: it is discussed only by those involved. No overall reform in the training and qualification of vocational teachers is being implemented. Some efforts are being made with regard to:

- developing a modern legal basis to regulate the training and qualifications of vocational teachers' (1998):

- improving teacher training in the vocational education and training sector, i.e., modernising existing curricula, which are still dominated by the theoretical component and traditional verbal teaching methods, and solving the problem of the lack of modern technical equipment;
- improving the career structure for teachers, which is currently organised in terms of the five levels outlined above; and
- modernising teacher qualifications by providing in-service and regionally based training in new pedagogical approaches such as the use of working teams, making students self-directed, problem solving and group- and project-work.

International projects are very important for the reform of vocational education and training and for improving teachers' qualifications. A distinctive feature of all international projects, which are based on bi- or multi-lateral contacts and are funded from abroad, is the complex approach they adopt: syllabus content is linked to the development of appropriate teaching materials, the supply of modern equipment and the methodology used in the training of teachers. The Phare Programme has included teacher training, carried out in partnership with Ireland, England, Scotland, Wales and Denmark. Bulgaria has also had cooperation projects with Germany and Austria, as well as projects funded by the World Bank.

8. *Connection between teacher and trainer training and labour market*

There is a lack of partnership between higher education institutions and vocational schools, and another gap between vocational schools and companies. The social partners are not formally involved in vocational education and training strategies. There are some cases where cooperation between the institutions does takes place but these are the exception rather than the rule.

9. *Findings*

Bulgaria provides an interesting example of in-school and in-service further education. This is not new for the country but there have been periods of stagnation. At the moment, this form of training is in the process of being modernised to bring it into line with socio-economic changes and the new needs of teachers. The in-school vocational qualification experience of Bulgaria may also be of interest to other countries.

Teacher and Trainer Training in the Czech Republic

1. Information on the country

- The population of the Czech Republic is 10.3 million.
- The rate of unemployment is 6.0% (1998).
- The youth unemployment (under 25) rate is 15.2% (end of 1998).
- Eighty-two per cent of basic school leavers go on to secondary or vocational schools.
- The estimated dropout rate of vocational education and training students is 5.35%.
- Compulsory education lasts 9 years.

2. The vocational education and training system

There are 3 categories of vocational institutions:

- secondary technical schools (756 schools in 1997/98), which offer a 4-year programme, leading to a full secondary vocational education with the possibility of taking an examination (Maturita, GSCE) which gives access to higher, third-level studies;
- secondary vocational schools (499 schools in 1997/98), which offer a three-year programme leading to a certificate entitling the holder to perform qualified vocational jobs; and
- integrated secondary schools (193 schools in 1997/980) which offer both secondary technical and secondary vocational schools programmes.

Vocational schools are very specialised and offer training in about 920 branches of study. Before 1989, apprenticeship training was carried out at the place of employment, but now this kind of training is also organised by, and carried out in, schools.

The number of vocational teachers and trainers (calculated on the basis of full-time equivalent) is 38,100, of whom 14,855 are working in secondary technical schools, 14,962 in secondary vocational schools and 8,282 in integrated secondary schools.

3. Teachers and trainers in the vocational education and training system

There are 5 different categories of teachers and trainers in the vocational education system:

1) general subject teachers;
2) teachers of vocational theoretical and practical subjects;
3) teachers who provide on-site practical training;
4) vocational education trainers (foremen in the workshops); and
5) trainers and instructors (foremen's assistants) who supervise the practical training.

4. Regulations

Teacher qualification requirements are laid down in the 1997 decree of the Ministry of Education.

- Teachers in the first category have an M.A degree from a university.

- Teachers of vocational and technical subjects are required to have a university or college examination (B.A. level) plus pedagogical studies (2 years) at an academic level, including on-site teaching practice.
- Teachers of specialised subjects, where no higher education exists (waiters, dressmakers, etc.) have to take a B.A. at a special teacher training college or follow a 6-term course of study to broaden their qualifications.
- Trainers (foremen) have a secondary vocational education and the Maturita, supplemented by complementary pedagogical study.
- Instructors have apprenticeship training and have done an additional pedagogical course ("pedagogical minimum").

There are no regulations on continuing education for teachers and trainers. The current legislation allows all sorts of public and private bodies to provide continuing and in-service training for teachers.

5. *Education of vocational teachers and trainers*

Initial training programmes for vocational teachers are not clearly described in the case study. No descriptions of the general curriculum are provided.

There is provision for a teaching practice period at appointed schools under the supervision of experienced teachers but there is no precise definition of the teaching practice required for vocational subject teachers.

No comprehensive survey exists of the numbers involved, but it is made clear that a variety of pedagogical methods is used.

6. *Continuing education and training of teachers and trainers*

A new, general programme for in-service, lifelong education was launched in 1995 but on-going training for vocational teachers is not dealt with specifically in this programme.

Responsibility for the further education of vocational teachers has been decentralised to the local school level and has, thus, become demand-led.

Until 1989, a network of continuing educational institutions existed. This tried to develop the idea of improving teachers' qualifications and to promote the supply of relevant courses. This network is no longer supported by the Ministry of Education, but still exists as an autonomous movement among some teachers.

Under the new market model, further education is provided by different institutions:

- universities and colleges, which still offer programmes and courses;
- regional pedagogical institutions, which also offer courses, though, in some cases, these are general institutions and do not offer specific courses for vocational teachers; and
- a large number of private commercial institutions.

There are many continuing vocational training programmes on offer in:

- new subject areas as well in existing subject areas, where the content has been modified and broadened;

- new education and teaching methods;
- personal development for teachers, including communication skills, conflict-solving methods and assertiveness training;
- the development of the civic society through education etc.

The only control the Ministry of Education exercises over these programmes is by way of an accreditation committee of independent experts which must approve each one.

A programme for selected pilot-school teachers was established under the Phare Vocational Education and Training Reform Programme.

7. *Development of vocational teacher training*

A National Board of Education will be established and should contribute to the development of policy and strategic goals for the educational system, including the training of vocational teachers and trainers. The teacher unions are to be formally represented on the board.

The social partners take a serious interest in vocational education and training, but no mechanisms, which would allow them to play a systematic part in teacher and trainer training, have been established.

It has been suggested that a period of practical training in the relevant occupation should be an integral part of initial teacher and trainer training. It should be born in mind, however, that some connections to the labour market do exist since the number of vocational teachers who work part-time is very high.

A National Curriculum Board for all levels of education is to be established. This should contribute to the definition of standards and establish systems of certification in vocational/technical education. Changes in curricula, which occur dynamically in a market economy, should be accompanied, in a systematic way, by changes in vocational teacher and trainer training.

At the moment, innovation comes from bottom-up initiatives, where teachers more or less develop and implement new educational programmes in schools at a local level.

8. *Links between teacher and trainer training and the labour market*

Interaction between the vocational education and training sector and the social partners is being developed. There is, however, no legal framework for on-going participation. Cooperation between the social partners and local vocational schools does exist, but key issues are decided, at national level, by the Ministry of Education. Up to the present, employers' and government agencies have not played an important role in teacher and trainer training. Trades unions pay a certain amount of attention to this issue and it is expected that the newly established "Board of Education", where the employers unions and associations will be represented, will be involved to some extent.

9. *Findings*

It appears to be difficult for the different categories of teachers to cooperate and to develop an integrated approach to teaching the subjects that make up the individual vocational training programmes.

There is no strategy for developing a coherent theory of training and further education for vocational teachers. The education and training provided seem to be rather arbitrary. Furthermore, there is no general conceptualisation of pedagogical innovation or of local school development, which might direct training and education towards generally accepted objectives.

Teachers, apparently, do not have any statutory right to further education. It is entirely up to the school management to distribute the financial means available for this. University and college courses are free of charge but, in many cases, teachers do, in fact, pay for their own courses.

Teacher and Trainer Training in Estonia

1. Country information

- Estonia has a population of 1.4 million people (1999). It is a bilingual country where 35% of the population is non-Estonian, mostly Russian-speaking.
- The unemployment rate was 9.6% in the second quarter of 1998.
- The youth (15-24) unemployment rate was 14.5% in the same quarter.
- Participation in initial vocational education and training programmes is decreasing and, in 1998, stood at 29% of those who graduated from primary education in that year.
- The dropout rate of vocational students was 10.4% in 1997.
- The number of vocational teachers is approximately 2,500.
- The length of compulsory education is 9 years.

2. The system of vocational education and training in Estonia

The Estonian educational system consists of pre-school, primary, secondary, vocational, university/higher level and adult education. The languages of instruction are Estonian and Russian. There are two options after basic school – upper secondary school (grades 10-12) or vocational school.

The vocational education and training system is undergoing change at the moment. A new Law on Vocational Education Institutions was approved in July 1998. The law lays down that there are two levels of vocational education and training:

i) vocational secondary education (*kutsekeskharidus* – ISCED level 3); and

ii) vocational higher education (*kutsekörgharidus* – ISCED level 5).

Admission to vocational secondary education is based on basic education or upper secondary general education. The length of studies for compulsory school graduates is a minimum of 3 years. Upper secondary school graduates can complete this level in one to two years. In some fields of secondary vocational education, the prerequisite for entry is general upper secondary education. Only the students who have completed either vocational secondary education or general upper secondary education are eligible to apply for vocational higher education. Graduates from vocational secondary schools who wish to continue their studies in a university must pass the same state examinations as graduates of upper secondary general institutions.

The total number of schools providing vocational education and training is approximately 90. Sixty per cent of vocational education and training institutions use only Estonian as the language of instruction, 20% use only Russian and 20% use both Estonian and Russian. Programmes have a minimum length of 120 study weeks, of which the occupation-specific subjects must account for at least 50%. Vocational education and training is school-based. Existing programmes are oriented towards providing theoretical knowledge, followed by initial practical training in school workshops and, later, by work practice in companies.

3. *Teachers and trainers in vocational education and training*

A vocational teacher (*kutseõpetaja*) is one who teaches vocational and specialised subjects in a vocational education and training institution. As there was no vocational teacher and trainer training in Estonia in the period after World War II, every activity in this field must be seen as an innovation. Estonia does not have specific bodies that are responsible for vocational teacher and trainer training but Tallinn Pedagogical University has started up initial training programmes for vocational teachers. Formerly, there were two different kinds of vocational teachers: professional subject teachers and training masters. These have been replaced by one vocational teacher category. Thus, it no longer makes sense to speak of "trainers" in Estonia: they are all vocational teachers now.

There are 2,350 vocational teachers in Estonia at present. The average age of teachers is high and rising. The main problem is how to attract young people to vocational teaching studies, as the job has a low status and unattractive salaries (2,200-2,500 EEK per month). The main reason for the low salaries is that lot of teachers work part-time. Full-time teachers can earn from 4,000 to 5,516 Eek a month. There is a need to train 50-70 new teachers every year but there are only 15 study places available. These places are financed by the state. It is possible to train students, if they are willing and able to finance themselves. Last year only one student was self-financing. In 1999, there were more than 30 applicants for the 15 places.

In vocational education and training institutions, 150 different professions and specialisations are taught. Every vocational teacher must be able to teach 4 or 5 different professional subjects and to organise practical exercises in them.

The types of vocational teacher and trainer training that are available in Estonia today are:

a) initial training (diploma or bachelor level);

b) continuous training to obtain a master's degree in vocational didactics;

c) secondary/continuous pedagogical training to prepare specialists/graduates for teaching; and

d) in-service pedagogical and professional training, in the form of short courses.

4. *The regulation of vocational teacher and trainer training*

The qualification requirements for teachers and headmasters are regulated by Decree No 35, 1998 of the Ministry of Education. Headmasters of vocational schools must have higher education, at least three years' leadership experience and have taken a 240-hour leadership course.

The teacher of general education subjects must have either:

- a higher education teaching qualification in the subject category; or
- another relevant higher education qualification plus a complementary 160-hour course in professional pedagogy.

The vocational teacher carrying out profession-related teaching and training must have either:

- a higher education teaching qualification and at least two years' experience; or
- higher education in the field, at least two years' work experience and a complementary 160-hour course in professional pedagogy.

An interesting requirement laid down in the decree is that vocational teachers have to spend at least two months in every three years working in the professions they are teaching.

5. *The education of vocational teachers*

Initial vocational teacher training takes place at Tallinn Pedagogical University. For admission into the programme, a secondary vocational education certificate is required. Applicants must pass an examination and an aptitude test. The length of initial training is four years for the diploma programme or five for the bachelor's programme. If the trainee already has a professional higher education, the course is one year full-time, and two year extra-mural, study.

The four-year study programme is divided into the following parts:

- three terms (semesters) of theoretical studies at Tallinn Pedagogical University, including school practice;
- four terms of specialised professional studies at other higher education institutions, including practice in a company or a similar institution; and
- one term at Tallinn Pedagogical University, including a second period of school practice and writing the final thesis.

The programme consists of the following blocks of subjects:

- general subjects (20 credits);
- specialised subjects (90 credits);
- profession-related teacher training courses (40 credits); and
- final thesis (10 credits).

One credit corresponds to one week of study. A total of 9 weeks practical school training over the 4 years is obligatory. Half of the modules from Tallinn Pedagogical University's training programme for general education teachers are included in the programme for vocational teachers. The modules on specialised professional subjects are taken at other higher education institutions and are part of the bachelor study programmes of these institutions.

The training programme for vocational teachers described above puts too much emphasis, relatively speaking, on theoretical and academic knowledge, while practical performance and the application of knowledge are given less attention. As the study materials available in Estonia are very limited, the main method of delivery is lectures. Other methods include independent work, workshops, discussions and seminar papers. Systematic mechanisms for assessing the quality and relevance of teaching within teacher training programmes are still not in place.

6. *Continuing and in-service training*

There are no in-service training centres for vocational training in Estonia. Some training is provided by the Centre for In-Service Training at Tallinn Pedagogical University but this is clearly not enough. Continuous and complementary training is financed by whoever requests it. This might be the state, the educational institution, the local authority, employer or the teachers themselves. According to the Law on the Public Service, 3% of the salary fund in the public sector (which includes teachers) is allocated to the provision of continuous and complementary training. Opportunities for in-service teacher training arise, mostly, in the context of international donor projects. Some teachers arrange in-service training through work practice in enterprises but there is very little interest in providing training for teaching staff.

7. *Development of vocational teacher and trainer training*

Since 1990, teacher training has been orientated towards the labour market and more student-centred teaching. The links between the world of work and the training of teachers are, however, still weak. There is a recognised need to undertake major changes in the area of teacher training in the Ministry of Education and at the Tallinn Pedagogical University. Several factors are impeding this development:

- Estonia does not have enough qualified teacher trainers;
- it is still not clear what the state wants in terms of initial teacher training;
- Estonia is a small and, at the same time, a bi-lingual country; and
- no independent institution for vocational teacher training and for pedagogical research has yet been set up.

Only a small number of vocational teachers is needed each year. The demand for teachers in the different specialities is even smaller so study groups must be set up by representatives from the different occupational groups. This means that training has to be spread out among different higher education institutions.

Foreign programmes, particularly the Phare Vocational Education and Training Reform Programme and bilateral activities with Finland, have been extremely important for the development of in-service teacher, and managerial, training.

There are two critical issues that have not yet been addressed in legislative and other reforms.

- The first is whether it would be more effective to organise vocational teacher training on the diploma level and to allow students to proceed to further education (bachelor studies) only afterwards.
- The second is that the method of allocating budgets on the basis of numbers of students favours larger units. Allocations to smaller schools are very small and this makes it impossible for them to train their teaching staff.

The official plans for education, including vocational education and training, for the next 10 years are not available but are currently being prepared. Ongoing discussions on how to develop a valid model for the changing society of Estonia are based on two documents, "The Concept of Vocational Education and Training" and "The Development Plan for the Period up to 2005". However, the question of training for vocational teachers is not, as yet, included in these discussions.

8. *Findings*

Vocational teacher training in Estonia has not yet been clearly defined and the resources allocated to pre-service and in-service training are, undoubtedly, inadequate. There is a need to reorganise the teacher training system. Because of its small population, it would appear that a reform based on consecutive pedagogical training for those who are already qualified subject specialists and who want to become vocational teachers is an obvious solution for Estonia.

Teacher and Trainer Training in Hungary

1. Information on the country

- The population of Hungary is 10.3 million.
- The unemployment rate is 9.2%.
- The rate of youth unemployment (under 25) is 15.7%.
- Participants in initial vocational education and training is 73%
- The dropout rate of vocational students is 13.3% (20% from training schools).
- The length of compulsory education is 9 years.

2. The vocational education and training system

Vocational training schools

Thirty-four point five per cent of primary school leavers go on to vocational training schools. The schools offer programmes which combine with secondary education. They issue certificates for vocational qualifications as well as for secondary school examinations. There are 154,300 students, 5,899 teachers and 4,385 practical teachers in these schools.

Secondary vocational schools

Thirty-three point seven percent of primary school leavers go on to secondary vocational schools, which offer a five-year programme.

Technical secondary schools

These offer programmes of 4 or 5 years' duration. They act as secondary vocational schools for the service industry. There are 208,415 students and 15,772 teachers in these schools.

The total number of teachers and trainers in vocational education and training in Hungary is approximately 25,000.

3. Teachers and trainers in the vocational education and training system

There are five categories of teachers in vocational education and training in Hungary:

- secondary school teachers who teach theoretical subjects and have a university degree with a teaching qualification;
- secondary school teachers of practical subjects, who, since the 1996 amendment, have to have a university degree, preferably in combination with a vocational certificate;
- vocational training school teachers, who are graduates of third level colleges;
- practical subject teachers who are required to have a college education and 5 years' practical work experience; and
- practical trainers who are required to have a vocational qualification and 5 years' practical experience.

4. *Regulations*

All teacher qualification requirements, which can vary for different occupational groups, are laid down by the Government Decree of 1997.

The Government Decree of 1996 recognises two university levels: B.A. and M.A. Pedagogical courses should take up 1,800 hours at both levels for most occupational groups though less for the health and commercial sectors.

5. *Initial training programmes for vocational teachers*

Initial training can be taken either as a full-time course, parallel with technical studies and followed by a distance-learning course lasting 2 terms or as a distance learning course of 4 terms. These options are available in most educational areas. A large part of teacher training is by means of distance learning.

An expert with a qualification in engineering and some years' professional experience can be employed as a teacher but is obliged to follow the teaching qualification course within 5 years of taking up employment.

Recently, there has been a greater emphasis on university degrees.

A large proportion of secondary vocational school teachers is not required to have prior labour market experience.

Teacher training does not take place at specific institutions. There is no higher education institution offering only vocational teacher training. Training is provided at the different universities and colleges, where the students graduate in their specific subjects. Seventeen institutions provide training courses for teachers. These are autonomous institutions and are allowed, by law, to set up programmes and issue diplomas. The quality of these programmes is evaluated by MAB, the Hungarian accreditation committee. Institutions are evaluated at least once in an 8-year period.

There are high standards of theoretical and practical knowledge, which allow for further development, in the disciplines of pedagogics and psychology. The programmes also aim at enabling graduates to work outside the school system. Vocational and educational consultancy and guidance are, therefore, included in the curriculum. Personal qualifications, such as independence, creativity, willingness to change etc. are regarded as necessary attributes for people who want to be teachers.

Curricula have changed recently in accordance with the new law on higher education. The coordinated strategy of the World Bank programme has provided considerable support to upgrading vocational teacher training, which it sees as a necessary step in the modernisation of Hungary.

Theoretical and practical knowledge of general pedagogy and psychology is combined with the application of specialised methodologies and practice in schools. For vocational teachers, the curriculum includes pedagogical and psychological subjects, vocational training and economy, the management of teaching, teaching methodology and technology, the development of teaching competence and vocational guidance. Among the special subjects offered are quality assurance, labour market training and training of adults.

More emphasis is now placed on teacher competencies (the ability to act), but Hungary also stresses the academic and scientific standards of the training programme so that teaching and learning activities in vocational education and training will be carried out on a solid knowledge base.

The development of a more uniform system of teacher training is a high priority in the country. There is a clear and observable tendency to incorporate the overall objectives of educational policy into teacher and trainer training. This is reflected in the inclusion of such elements as quality assurance and the development of competence in areas like learning processes, organising activities, active learning, project-work etc. This tendency also meshes well with the general modular-credit system, which is also being introduced, starting with a limited number of institutions. The process of introducing a modular-credit system into vocational teacher training is also already underway.

The quality of vocational teacher training is said to be assured by a TQM system, which is supported by the Phare and Tempus programmes.

6. *Continuing education and training of teachers and trainers*

There is no systematic approach to continuing education and training for teachers and trainers in Hungary. However, a government decree of 1997 lays down that continuous training of teachers is mandatory. According to this decree, teachers should undertake further training once every 7 years.

Schools must now spend 3% of their budget on further training for teachers. Teachers themselves are expected to pay 20% of the costs.

At the moment, there is an increasing number of different continuous training programmes. The National Institute of Vocational Education (NIVE) provides programmes in cooperation with teacher training institutions and the teaching faculties of special teacher-training institutions. The number of courses offered is not known, but 3,068 specialised teachers attended the courses in 1996. The duration of the courses varies from 3 days to six months.

7. *Development of vocational teacher training*

Major modifications have been introduced into the study programme for vocational teachers. This was to bring the programme into line with reforms in the vocational education and training system.

The largest development programme has been sponsored by the World Bank. This is a programme aimed at reforming training for specific occupational groups in secondary vocational schools. The programme attempted to establish what the new requirements for vocational teachers are. It included a sub-programme on vocational teacher training, which focused, *inter alia*, on clarifying the objectives and requirements of training and on defining the content and methods necessary to achieve them. A number of new elements were added to the modular syllabus and increased attention was paid to the practical aspects of teaching.

A new government took office in 1998. It has embarked on a new, general reform of higher education. More support will be given to local institutions and these will offer a wider range of opportunities to students. A credit-system will be set up, which will allow students to add new subjects to those they have already studied. The pedagogical and psychological aspects of vocational teacher training will be strengthened. There will be greater emphasis on the specifics of vocational subjects, on methodology training and on practical exercises.

It is expected that measures to regulate continuous and further training for vocational teachers will be introduced.

8. *Links between teacher and trainer training and the labour market*

The labour market partners, which are defined as the Chambers of Commerce, Agriculture and Crafts, have responsibility for practical training and for final vocational education and training examinations. So far, however, they do not appear to have developed very significant relationships with teacher training institutions. The social partners, however, are beginning to take an interest in teacher training.

9. *General findings*

A good, new, teacher-training curriculum has been developed. It remains for the details to be hammered out and the programme to be implemented. This will need to be monitored closely and to be supported by a series of development initiatives.

Teacher training in Hungary is too scattered and tends to be carried out in too many different institutions. It is, moreover, not sufficiently linked to educational research and development work. Teacher training is separated from actual work practice. There is not enough continuous training, particularly training that is carried out in collaboration with representatives of the different occupational sectors.

A network of teacher training providers does exist but it is rather difficult to establish and maintain uniform and adequate standards in the provision of training, as the numerous institutions involved probably have limited numbers of students. There is also the question of whether these institutions are involved in pedagogical research and whether this has an impact on the teacher-training courses they provide.

Teacher and Trainer Training in Latvia

1. Country information

- Latvia has a population of 2.5 million, the ethnic composition of which is: Latvian, 45%; Russian, 33%; Belorussian, 4%; and others, 8%.
- The unemployment rate is 18.3% (1996)
- The youth unemployment rate is 25.6% (1995)
- Participation in initial vocational education and training, as a proportion of all students in secondary education, is 40% (1996).
- The dropout rate of vocational students is 13%.
- The number of vocational teachers is approximately 6,000.
- The length of compulsory education is 9 years.

2. The system of vocational education and training in Latvia

Vocational education and training lasts from 1 to 4 years and is provided through four types of programmes:

- basic vocational education, which provides basic vocational training to those who have not completed basic schooling by the age of 15, and is of 2 years' duration;
- secondary vocational education, to which students can be admitted when they have completed 9 years of education, and which offers either
  a) vocational education, without general secondary education, of either 2 or 3 years' duration or
  b) both vocational training and general secondary education of 4 years' duration on the completion of which students are also eligible for admission to higher education;
- vocational post-secondary education of 1-2 years' duration after the completion of general secondary education; and
- specialised secondary education, which provides both vocational training and general secondary education for a further 2-3 years after secondary school, is of 4-5 years' duration and leads to eligibility for admission to higher education.

The number of students in vocational education and training has been falling gradually over the past few years. For the school year 1995/96, enrolment was 43,170 students in 121 schools. Approximately 26% of school leavers enter vocational training institutions every year and 12% enter secondary specialised institutions.

3. Teachers and trainers in vocational education and training

In Latvia, training for vocational teachers and trainers has hitherto not been regarded as a distinct and separate issue. Traditionally, there is a single training system for all teachers, no special attention is given to those who will be employed in the vocational education system and no specific policy aims for training these teachers have been formulated.

The total number of vocational teachers is approximately 6,000 spread over 3 different vocational teacher groups:

- general subject teachers;
- vocational subject theory teachers; and
- "masters", who provide practical instruction in school workshops.

It is estimated that only 50% of vocational teachers have a pedagogical qualification. Thus, 3,000 teachers in the vocational education and training sector in Latvia urgently need basic training in pedagogical skills. There are 1,650 "masters" (or craft teachers) and these, normally, have had no pedagogical training at all.

4. *The regulation of vocational teacher and trainer training*

The educational system in Latvia is regulated by the 1991 Law on Education. Different regulations have been brought in under this law, but it is very difficult to find anything concrete about teacher and trainer training in these, apart from provisions about teachers' rights to self-education and the duty of school administrations to help teachers to improve their levels of qualification. Different types of teacher and trainer training are not defined by the legislation.

All teacher training takes place at higher education establishments. Although the Ministry of Education and Science has overall responsible for higher education (e.g. with regard to regulation and general supervision), these institutions enjoy considerable autonomy, which extends to the organisation and content of teacher-training programmes. In fact, there is not much direct state supervision of higher education institutions. What little supervision there is, is carried out, mainly, through the financing of higher education programmes and through the accreditation of programmes and institutions. Financing, however, is the responsibility of the Higher Education Council, which is appointed by Parliament and is not subordinate to the Ministry of Education and Science. Sources of finance for higher education programmes are the state (80%), fees (15%) and other income (5%). There is no training provision for craft instructors.

"Pure" higher education programmes of least 4 years' duration lead to the award of a diploma. In other cases, a bachelor-level diploma, specifying the professional qualification, is issued.

5. *The education of teachers and trainers*

Though teacher and trainer training is within the scope of the Ministry of Education and Science, we cannot speak of an established and stable teacher and trainer training structure. For the moment, the only teacher education available is that provided in universities. The education of instructors, who have only vocational qualifications, is decentralised and rather chaotic. Six higher education establishments provide programmes in pedagogy and teacher education. The study programmes for secondary teachers are common for all types of schools. Entry requirements generally do not differ from those for other academic programmes: the applicant has to have a certificate of general secondary education (which can also be obtained at the end of 4-year vocational programmes). No previous work experience is required. In principle, there are no alternative entry routes, such as evening schools for adults.

The number of students, who would like to go on to teacher-training courses in universities or colleges at the end of secondary school, is decreasing every year.

Traditionally, instructors or "masters" in vocational schools are specialists who have secondary special or higher education in their specific fields. Most of them do not have a pedagogical

education. There are separate pedagogical schools for higher education and these offer different programmes in general pedagogics, pedagogical psychology, educational philosophy, curriculum subject theory and didactics. In 1996-97, Latvia, in partnership with Denmark, developed a vocational teacher-training programme, targeted directly at vocational teachers and at allowing them to tackle specific problems in vocational education and training.

Vocational teachers can be divided into two groups, theoretical and practical training teachers. Teachers with an academic background already have a pedagogical qualification, acquired, as a supplementary qualification, at university but these teachers have no workplace experience and are ill equipped to adopt interdisciplinary approaches to teaching. "Masters", on the other hand, need basic pedagogical skills to enable them to improve the ways they teach the practical aspects of their occupational skills.

6. *Initial training programmes for vocational teachers*

In Latvia, there are no specialised higher education establishments for the training of vocational teachers. Nor are there pedagogical courses available for specialists in different occupational fields who wish to take up work as vocational teachers.

A professional teaching qualification can be conferred by higher education establishments only, and the duration of studies cannot be less than 4 years. The period of practical training in teacher education is 8 weeks. Each study year is divided into two semesters and there is an examination session after each semester. (Usually, there are up to 5 written or oral examinations in pedagogical disciplines). Course programmes include:

- teaching methodologies for different subjects;
- evaluation methods;
- philosophy of education;
- development of educational programmes;
- methodology of practical teaching;
- integration of different subjects etc.

The main method of teaching is still lectures but demonstrations, groups work, simulation of real situations etc. are also used. At present, there is no regular and systematic evaluation of the quality and relevance of teacher training programmes in Latvia.

7. *Continuing training of vocational teachers and trainers*

The new draft Education Law will stipulate the right of teachers to use 30 days in every 3 years for their own professional development while keeping their position and employment. At present, upgrading for vocational teachers still takes the form of courses and seminars. These are organised centrally, as, for instance, when the Centre for Vocational Education organises courses for woodwork teachers and teachers/instructors from all schools with woodwork on the curriculum are invited to participate. Continuous education programmes are offered by higher education establishments and by other institutions such as educational support centres. Over the last two years, 13% of teachers took part in continuing vocational training courses.

The latest methods in pedagogy and didactics come from the various international projects in which competent foreign experts are involved. The teachers trained in these projects act as trainers of other teachers. Transnational projects have had important effects on Latvian teacher and trainer training.

Thus, 200 teachers have been trained under the Phare Vocational Education and Training Reform Programme, 120 under the Danish/Phare Business Network Programme ("BERIL") and 125 under the Tempus Programme.

As far as day-to-day activities and in-service training are concerned, the annual exhibition of teachers' work, "*Experience*", which is organised by the Centre for Vocational Education is worthy of mention. This exhibition includes teaching aids, tests, sets of exercises, workbooks for practical work etc. Before this event takes place, similar displays are organised in vocational schools and the best work shown in these is chosen for the exhibition. Activities to facilitate the exchange of experience are organised on a regular basis by methodological councils on various subjects. These are also coordinated by the Centre for Vocational Education. It should be noted that, though participation in any educational activity is voluntary, the level of interest and activity among teachers is considerable.

8. *Links between teacher and trainer training and the labour market*

Teacher and trainer training, including the retraining of the "masters", is not linked at all to the employment system or to the activities of the social partners.

9. *Development of vocational teacher and trainer training*

Up to the end of the 1980s, Latvia was entirely integrated into the Soviet Union. Education, like the economy, was centralised and everything was coordinated from Moscow. Traditionally, all secondary teachers followed the same study programmes. This model has remained in place up to the present but changes are now underway. The major contributing factor has been the various transnational projects which started in Latvia after 1990. Within these projects, lots of attention has been paid to the education of teachers (in, for example, active teaching methods, methods of evaluating quality in education, the development of teaching aids, tests etc.).

The main project dealing exclusively with teacher and trainer training was the Danish DELATE project (1996-97). This involved an attempt to organise the education of vocational teachers and trainers into a coherent system for the first time. In 1997, the project came to a successful conclusion with the development of a prototype of a training programme on the teaching of vocational subjects. A paper, outlining the theoretical framework, was drawn up. An educational plan, a draft curriculum, guidelines and teaching materials were prepared and teachers/trainers were trained. The plan was that basic pedagogical training of vocational teachers should start at 5 universities in January 1998. Unfortunately, the Ministry of Education and Science has not yet prepared a regulation on training for teachers of vocational subjects and the financial issues are still not solved. Twenty-five teachers from medical schools are taking part in the DELATE project education programme in the 1998/99 school year at Riga Technical University. It is expected that, in the near future, the Ministry of Education and Science will approve a regulation on training for teachers of vocational subjects and that vocational teachers and trainers will start their studies in 5 Latvian universities/colleges.

Another important initiative is the establishment of regional education and examination centres, organised jointly by the Phare programme and the Centres for Vocational Education. Issues in the training of vocational teachers and trainers will be a key concern of these centres. The setting up of a Resource Centre to give support to vocational teachers will be another important step forward. The Centres for Vocational Education will also play a major role in the continuing training of vocational teachers.

At present, expectations are centred on the new draft law, which will lay down the main principles governing the Latvian vocational education and training system. The law should open the way to the gradual solution of central issues and this, in turn, is expected to have a positive influence on the development of vocational teacher and trainer training.

10. Findings

Latvia is one of few countries in Central and Eastern Europe which has developed and implemented a specific, targeted, pre-service training programme for vocational teachers and trainers, organised as a consecutive course and provided by five specialised institutions.

Teacher and Trainer Training in Lithuania

1. *Information on Lithuania*

- Lithuania has a population of 3.7 million.
- The rate of unemployment in 1997 was 5.9%, as measured by the number of unemployed registered in the Labour Exchanges or 14.0%, according to the Labour Force Survey carried out by the Dept. of Statistics.
- Youth unemployment (under 24) was 26.2% in 1997.
- Students in initial vocational education and training represented 37.9% of all students in secondary level education.
- The dropout rate of vocational students is 9.2%.
- The duration of compulsory school is 9 years.

2. *The vocational education and training system*

Initial vocational training is currently provided in vocational schools and colleges.

- Basic vocational education, (stage 1 programmes of vocational schools) is of 2 or 3 years' duration and is directed at students who have not completed compulsory schooling.
- There are two paths in secondary vocational education. The first offers stage 2 vocational school programmes, which are of 3 or 3.5 years' duration and lead to vocational qualifications only. The second leads to both general education (Maturita) and vocational qualifications. These are the stage 3 vocational schools and are of 4 years' duration. Both are for students who have completed compulsory school.
- Post-secondary vocational education offering only vocational qualifications is available to those who want to acquire a vocational qualification at the end of upper-secondary school. These are stage 4 vocational school programmes and are of 1 or 2 years' duration.
- Higher vocational (college-type) education is available to those who have completed upper secondary school and want to be a qualified specialist.

In 1997, 6,927 students participated in basic vocational education, 42,113 in secondary vocational training, 4,630 in post-secondary vocational education, and 30,329 students studied in colleges.

Labour market vocational training is provided by labour market training centres.

3. *Teachers and trainers in vocational education and training*

The way teacher and trainer training is conceived in Lithuania is outlined in the White Paper on vocational education and training (1998). The term "vocational teacher and trainer" includes all categories of personnel concerned with vocational teaching or training:

- vocational teachers (in vocational schools);
- vocational lecturers (in vocational colleges);
- instructors/trainers (in enterprises);
- lecturers (in labour market training centres); and

- managers of vocational training.

In 1998, a total of 3,900 vocational teachers/trainers were employed in the vocational education institutions under the Ministry of Education and Science. Approximately the same number of vocational teachers and trainers are working in vocational education and training institutions under the Ministries of Agriculture, Social Security and Labour. The qualifications of vocational teachers/trainers (under the Ministry of Education and Science) are as follows:

- of the lecturers in vocational colleges, 95% is educated to high school level in the subjects they teach, less than 10% has the necessary pedagogical education and 2.8% has a master's degree in pedagogy.
- of the teachers/trainers in vocational schools, 54% is educated to high school level in the subjects they teach, while less than 10% has the necessary pedagogical education and 2.2% has an MA in pedagogy.

4. *Regulations of teacher and trainer training in Lithuania*

Teacher and trainer training is regulated by three laws: Law on Education (1991); Law on Science and Studies (1991); and Law on Vocational Education (1997). Details of teacher and trainer training programmes and courses are regulated by the Regulations on Teacher Training and the Regulations on the Certification of Teachers. A conceptual perspective on teacher and trainer training is to be found in the White Paper on vocational education and training (1998). The main principle laid down in the normative documents is that vocational teachers are trained to bachelor level at higher education institutions. They can also be trained in specialised, non-pedagogical high schools so long as they take supplementary pedagogical courses of not less than one year. The autonomy of high schools means that the content of the training (study programmes, the way they are carried out etc.) is decided by the high school. It is important to point out that the interaction between government agencies and teacher and trainer-training institutions is not at all smooth. The major initiatives are taken by the high schools, with the result that teacher and trainer training tends to be more ad hoc than organised in a coherent framework.

Changes are underway in Lithuania. The White Paper, which reflects modern concerns in teacher and trainer training, states that consecutive training is the best way to train teachers and trainers. Subject-specific qualifications can be acquired in any institution. Initial teacher and trainer training, leading to a teaching qualification, is to be carried out only after teachers and trainers have taken up positions in vocational schools. This training is to be carried out by specially designated (and ministerially approved) institutions of higher education.

5. *Educational paths to becoming a vocational teacher and trainer*

Priority for admission to teacher training is given to those who have completed a programme of vocational training (in a vocational school). There are other teacher and trainer training programmes for teachers who do not have the necessary levels of education or who request such courses on their own initiative.

Initial training for vocational teachers and trainers is carried out by higher education institutions with departments that offer teacher and trainer-training programmes. In Lithuania, teacher and trainer training is concentrated in 7 educational institutions, 6 of which are universities. Teacher training is offered, either in "parallel" form, i.e., in programmes in which specialist subjects and pedagogical training are integrated, or in "consecutive" form, i.e., in programmes where specialist subjects are studied first and pedagogical training, at either "minimal" or master degree level, is

provided afterwards. Training for vocational teachers is linked to the general classification of vocational education and training programmes into 14 groups, although subject-specific teacher training is available in only three fields.

6. *Initial training programmes for vocational teachers*

Undergraduate studies take up to 5 years, graduate studies up to 2. The minimal duration of a programme leading to a teaching qualification is 1 year. Training programmes for teachers and trainers can be classified into three groups:

- programmes which have both specific subject and teacher training components;
- teacher training programmes (for those who have already acquired subject-specific qualifications); and
- programmes leading to a degree of Master of Pedagogy (also for those who have already acquired subject-specific qualifications).

It should be noted that the programmes of different universities vary considerably in content. Initial vocational education and training programmes are provided by two universities. Students can take certain specialist subjects (e.g. agricultural mechanics) and teaching subjects. Teaching subjects are only a small part of the programme. Two universities offer minimal training programmes for teachers/trainers who have no teaching qualifications. These programmes pay a lot of attention to the practical (didactical, methodological) aspects of teaching.

Integrated programmes, which have both specific subject and teacher training components, are followed by full-time students who enter university immediately after they finish secondary or vocational school. Minimal teacher training and graduate programmes, however, are provided for in-service teachers. They are organised in cycles, i.e., 1-2 weeks of study at the university followed by work at a vocational institution. It is common practice for university teachers to provide this type of course in vocational training institutions.

Study methods depend on the type of programme. In integrated programmes, lecturing is the main method of delivery, the groups of students are large, subjects are more theoretical and students get very little practical experience. In other programmes (such as the minimal teacher-training and graduate courses), dialogue is the prevailing mode and methods such as project work, real situation simulations, planning games, case studies, role-play and others are employed. Individual projects are very important in graduate study programmes. Teacher and trainer training programmes are usually integrated into other programmes with the result that most of the lectures are only partly related to teacher training.

7. *Continuing education and training of vocational teachers and trainers*

Two forms of continuing teacher and trainer training exist:

1) higher level studies (to master level and doctoral levels), which take a considerable length of time, and
2) vocational adaptation, which allows vocational teachers and trainers to develop their qualifications by means of short courses.

Continuing teacher and trainer training is carried out at centralised institutions of education, typically centres of vocational development and relevant departments in higher level institutions. Continuing training study programmes, i.e. graduate studies in educational science for teacher

trainers, are offered by three universities and can be taken in specialised fields, such as teacher and trainer training, management issues and didactical studies.

The White Paper proposes that continuing training of 2-4 weeks per year be provided for vocational teachers and trainers. In 1997, there were 21 courses to upgrade qualifications carried out and 349 vocational teachers and trainers participated in them. Interestingly, it also proposes that teaching staff qualifications be developed, not only through courses in specialised centres, but also by means of in-service training in the teachers' own schools or colleges. This is regarded as the best way to revitalise teaching methods and to establish new vocational education and training programmes.

8. *Links between the teacher and trainer training system and the labour market*

Genuine links between individual institutions providing teacher and trainer training and the employment system are of a local and episodic character. On the national level, both bodies are represented on various vocational education and training management bodies and these provide a forum for communication between them. Employers' associations and trade unions are also consulted on methodological issues by teaching bodies. Student research activities, which involve investigations into the labour market and into the qualification requirements of companies, provide another means of increasing communication between the two systems.

9. *Development of vocational teacher and trainer training*

Up to the mid-1990s, teacher and trainer training was carried out in a uniform fashion throughout the USSR. In the larger republics, vocational teacher training was delivered in special higher-level schools and the programmes had both subject-specific and pedagogical elements. In the smaller republics, including Lithuania, there were no such higher schools. In Lithuania, vocational teacher and trainer training was integrated into the programmes of three specialised higher schools which offered 5-year study programmes, 10% of them in teacher training subjects. Teachers and trainers working in big enterprises and organisations were not given any special training.

By the end of the 1990s, integrated teacher and trainer training was phased out. In the debates that preceded the reform of the educational system, the parallel teacher and trainer training system was judged to be ineffective and inadequate to the needs of the market economy. A reform of teacher and trainer training is needed to ensure innovation, creativity, constant renewal of curricula and applicability to changing conditions.

The new model of teacher and trainer training in Lithuania has been influenced by the experience of Germany, the Netherlands and, particularly, Norway. In fact, the model outlined in the White Paper (1998) is closest to the Norwegian example. Further reforms in teacher training will be contingent on the implementation of the proposals put forward in the White Paper. The momentum for reform will be supported by two new EU projects which concentrate on the development of the Lithuanian teacher and trainer-training model. These projects, which are consciously being used as national vehicles to promote the revitalisation of teacher and trainer training, are due to start up at the end of 1998. They are:

- the Phare Vocational Education and Training Reform programme project "The National Institute for Initial Training for Vocational Teacher"; and
- the Leonardo programme project "The Systematic Organisation of the on-going Development of Vocational Education and Training Personnel".

These projects, which are also coordinated with one another, are aimed at solving a whole range of basic problems, by bringing the experiences of EU countries to bear on them. The partners in the projects are the main institutions providing teacher and trainer training in Lithuania and institutions from Germany, Denmark, the Netherlands and Norway.

In Lithuania, as in many other countries of Central and Eastern Europe, the training of teachers and trainers is rarely addressed in public discussions. However, the involvement of foreign institutions and the status of collaborative, transnational projects are clearly helping to improve the social standing of vocational teacher and trainer training.

Teacher and Trainer Training in the Former Yugoslav Republic of Macedonia

1. Country information

- Macedonia has a population of 1.9 million people, 66% of whom are ethnic Macedonians and 23% are ethnic Albanians.
- GNP per capita in 1997 was USD 1,000 and has dropped by 40% as a result of the crisis in Serbia.
- The rate of unemployment is 32%.
- Youth unemployment (15-19 years) is 77%.
- Participation in initial vocational education and training is 65%.
- Approximately 6% of GDP is spent on education; salaries and daily running costs account for 95%, which leaves little for investments in equipment and development.
- The Phare programme for the reform of initial vocational education and training runs from 1998 to 2002.

2. The vocational education and training system in the Former Yugoslav Republic of Macedonia

While the provision of vocational education and training in schools is adequate in quantitative terms, the quality of the provision does not meet the demands of the market. Reform is underway but this needs time and money particularly as there is not much expertise in the management of vocational education and training in the Ministry of Education. The current provision for vocational education and training does not address the needs of the ethnic minorities. The legal framework allows for vocational education and training on all levels, including apprenticeships. The national vocational education and training system is still in the initial stages of development.

The framework strategy envisages greater devolution of responsibilities to the school level. However, current ministerial policy and activity works in the opposite direction. The financing of education is highly centralised. The legal framework does not allow enterprises to offer vocational education and training services but it does allow schools to enter the market as producers and providers of services. There is no collaboration between the key ministries which have a stake in vocational education and training. Vocational pilot schools have developed good links to enterprises but other schools have no networks with local enterprises. The curricula make provision for training in companies, but this element is not put into practice. Standards exist for education but they have not been developed on the basis of analysed needs but on decisions taken at central level. Thus, there is a need to develop a sustainable national system to collect and analyse data on skills requirements. Initial vocational education and training is provided in three languages. The dropout problem and the needs of disadvantaged groups are not addressed. There are no formal links between vocational education and training and higher education.

A vocational education and training apprenticeship system should be established, particularly for minorities and that system should take account of different cultural values. As more children choose general secondary education, there will be a growing need for vocational education and training organised as continuing vocational training to fill the skills gap. Similarly, there is a need for vocational education and training for university graduates, given the highly theoretical education they receive at university. There is a general need for to build up the capacity for human resource development at all levels.

3. *Teachers and trainers in vocational education and training*

There are three types of teacher and trainer training in the educational system of Macedonia:

- institutional education, which is at university level in one of the pedagogical streams offered by the Pedagogical Faculties in Skopje, Bitola and Stip;
- compensatory or consecutive training which is provided for graduates from faculties that do not offer pedagogy and requiring three two-term exams after which the students can work as teachers; and
- other forms of education.

All three types of vocational teacher and trainer training is carried out in universities or at the Centre for Vocational Education and Training & Development in Bitola. Attempts to set up private centres for teacher training have been made but these centres have problems in getting their certificates approved.

4. *The regulation of vocational teacher and trainer training*

The different types of teacher and trainer training, as defined in the main laws and regulations, are:

- training provided by the university sector, and
- training provided in post-secondary education, which is not part of higher education.

The bodies responsible for controlling the work of the teacher and trainer training institutions are the Ministry of Education, the Pedagogical Institute and the Pedagogical Inspectorate of the Republic of Macedonia. The Ministry of Education approves the curricula for all types of vocational education and training in accordance with the recommendations of the Pedagogical Institute. Academic institutions are independent, as far as the preparation of curricula is concerned.

5. *Education of vocational teachers and trainers*

There are no specially defined criteria for teacher and trainer training, though such training is a condition for employment in the vocational education institutions. The general admission requirements, laid down by law, are one year's work experience and a professional examination. All prospective student teachers have to take the entrance examinations set by the respective faculties. There are no alternative entry routes into teaching.

Pedagogical higher education lasts four years. Graduates who have no pedagogical training must take a consecutive programme which requires examinations but where organised lectures are not provided. The main components of the teacher training programme are:

- curriculum design and teaching methods;
- educational and psychological themes;
- sociological issues and areas of innovation; and
- (sometimes) school organisation and management.

Teaching and learning methods are very traditional and predominantly of a scholastic nature. A new concept of pre-service teacher and trainer training has been developed as a TEMPUS project but has not yet been put into practice.

6. *Development of vocational teacher and trainer training*

The main impediment to the reform of teacher and trainer training is the slow transformation of university institutions. This is due, among other things, to national budgetary constraints. The changes that have occurred can be attributed, particularly, to donor projects which have a teacher-training component.

A new law on higher education is being prepared. The current state of teacher and trainer training in the country is generally considered to be rather satisfactory. Establishing a flexible curriculum for vocational teacher and trainer training is an area of major concern.

Much will depend on consultative assistance from European and other international cooperation partners in the coming years. Material and methodological support will be needed on a massive scale, as will student and staff exchanges etc.

More support is expected to be given, in the coming years, to teacher and trainer training provided by institutions other than universities as this type of training is more likely to promote the integration of practical work and learning processes in the vocational teaching.

The support network of teacher and trainer training consists of:

- the Institute of Pedagogy at the Faculty of Philosophy in Skopje;
- the Centre for Vocational Education and Training & Development in Bitola;
- the Institute for Political and Sociological Research; and
- all the Pedagogical Faculties.

There is no doubt that these institutions must be modernised and given access to current pedagogical theory and practice. To support the modernisation and democratisation of vocational teacher and trainer training programmes, twinning arrangements and other partnerships with EU institutions should be established.

Teacher and Trainer Training in Poland

1. Information on the country[3]

- Poland has a population of 38.6 million people (1997).
- The unemployment rate is 10.2% (1997).
- Youth unemployment rate (under 25s) is 21.2% (1997).
- Participation in initial vocational education and training is 63.7% (1997) of all students in secondary education.
- The dropout rate of vocational students is 4.4% (1997)[4].
- Number of vocational teachers is 49,420 (full-time) plus 20,822 part-time teachers.
- The length of compulsory education is 8 years.

2. The vocational and education training system in Poland

Vocational education in Poland is school-based and is integrated into the overall system of education. Vocational schools provide both vocational qualifications and general education which enables students to continue their education at higher levels. Vocational schools are often part of educational complexes, linked to particular groups of occupations and made up of schools at different levels: basic vocational, secondary (vocational lyceum, technical school) and post-lyceum.

Vocational education is provided in:

- secondary vocational schools (4 year lycea);
- basic vocational schools (3 years);
- secondary technical schools (4 to 5 years);
- technical lycea, which are still at the experimental stage (4 years); and
- post-secondary vocational schools which are intended for graduates of general secondary schools (2 years).

Because of the differences between the curricula, it is difficult to change schools, and transition from one vocational track to another at the end of secondary school is a problem. About 31.7% of those entering secondary education go to basic vocational schools and then enter the labour market. About 32% go to secondary vocational school and, of these, 25% go on to higher education institutions. General secondary schools currently teach 32.8% of young people and prepare them for further studies; this share is expected to increase to 45% in the near future.[5]

The curricula of vocational schools are made up of three components: general education, theoretical vocational education and practical instruction. The balance between these depends on the level and type of school. Thus, in basic vocational schools, general education adds up to about 40% of total teaching hours, whilst in secondary technical schools and vocational lycea the percentage is over 50.

3 Statistical Yearbook 1998, GUS Warsaw 1998

4 Key Indicators 1998 based on Central Statistic Office data

5 Statistical Yearbook 1998, op. cit., *Oœwiata i wychowanie w roku szkolnym 1997/1998*, GUS, Warsaw 1998.

3. *Teachers and trainers in vocational education and training*

The vocational education and training system is essentially school-based and employs the following categories of teachers, who all have the formal status of a teacher:

- teachers of general education subjects;
- teachers of theoretical vocational subjects; and
- teachers who provide practical instruction and occupational training.

The last two categories have been given the common title of teachers of vocational subjects. Teachers of general subjects are nearly as many in number as teachers of vocational subjects. There is also a fourth category: practical instructors in workplaces.

Most teachers of vocational subjects are educated in technical, agricultural or commercial higher education institutions. The typical path to becoming a practical vocational teacher is:

- the prospective teacher undergoes vocational education and training in a technical or vocational school;
- this is followed by work experience in the occupation concerned; and
- the student then takes preparatory teacher training courses in one of the institutions providing continuing education.

Whereas 87% of teachers working in secondary and post-secondary vocational schools have graduated from a higher education institution, only 65% of teachers in basic vocational schools have higher education. Likewise, not all teachers possess the required pedagogical qualifications.

4. *The regulation of vocational teacher and trainer training*

Pre-service teacher training takes place at higher academic institutions, which are regulated by the Higher Education Act. These institutions are fairly autonomous so the influence of the Minister of Education on what they teach is very limited. Within higher education institutions, the task of drawing up curricula is devolved further to the units which offer programmes in the different areas of study, e.g., to the different faculties.

Institutions for the professional development of teachers (i.e. for in-service and continuing vocational training) were set up under the Education System Act and are regulated by a decree of the Minister for Education. There are also institutions under the direct authority of the Ministry of Education which play an important role in the provision of continuing training:

- local institutions for the professional development of teachers (WOM); and
- The National Centre for the Professional Development of Teachers.

There is no specific sub-system for educating vocational teachers. The higher academic institutions do not provide subject-specific training courses which would prepare people to teach vocational subjects: only *optional* pedagogical education is offered.

5. *Education of teachers and trainers*

The education system for vocational teachers is fragmented. There are over 30 higher institutions engaged in providing this education and each one of these is autonomous. Teacher training is one of many tasks performed by these institutions. Furthermore, the institutions are quite academic in orientation. They lean towards theory and knowledge and lack expertise in occupational experience

and skills. Educational profiles continue to be too specialised and the tendency to train teachers in a single subject persists. The programme is effectively an "add-on", in that psychological-pedagogical education is "tacked on", either simultaneously or subsequently, to education in a particular branch of knowledge. Teacher training is an optional course in pedagogical studies which runs parallel with studies in a specific area. It is organised either within a full-time study programme or on an extra-mural basis (i.e., through irregular or evening classes or through distance learning).

Access to higher education, including initial teacher training, comes after 12-14 years of learning and is based on the Maturita examination. Neither attendance at a technical/vocational school nor work experience are counted. The entry procedures are set by the higher-level schools. In general, the demand for third-level courses greatly exceeds the supply. However, students who choose pedagogical education as part of their studies (on an optional or post-diploma basis) do not need to satisfy specific entry conditions and enrolment is open to those who are interested.

Because third-level institutions are quite autonomous, curricula differ from institution to institution. Pedagogical education is entirely the responsibility of those units which run teacher-training programmes. The organisation, programmes and forms of pedagogical education are, thus, very varied. According to the regulation on teacher qualifications, a teacher should have at least 270 hours of education and training in the fields of psychology, pedagogy, didactics and other socio-pedagogical disciplines, as well as a minimum of 150 hours teaching practice. The methods used to teach these core subjects are typical of academic higher education institutions, i.e., lectures, class discussions and seminars. Laboratory exercises are included in teaching methodology and technical education courses. Higher education institutions work together with vocational schools as part of their teaching methodology and teaching practice programmes. Part of the methodology courses are sometimes organised in the relevant workshops of the vocational schools, but this is not the norm. Teaching practice or placements for student teachers in vocational schools is not uniform in the way it is organised. Examinations are usually taken in the core subjects and the student must also achieve a pass grade in his/her teaching practice.

6. *Continuing and in-service teacher training*

Provisions for the professional development of vocational teachers are poorly developed and centre, mostly, on "intra-educational" links involving specialist centres, which are themselves quite underdeveloped. In-service and continuing training of vocational teachers is the responsibility of the local institutions for the professional development of teachers (in the 49 voivodeships, supported by the Voivodeship Methodological Centres (WOM). The local institutions are geared, predominantly, to teachers working in general education. There are only 43 consultants on vocational education employed in all of Poland in the network of the 49 local institutions for professional development.

The National Centre for Teacher Professional Development (CODN) runs and coordinates projects on a country-wide basis. Branch Institutions, which are under the authority of other ministries, also provide support to teachers in vocational schools. Centres for Practical Education were established in 1996 to raise the quality of practical vocational education. These are also expected to play a role in specialised training for vocational teachers.

The market for educational services has created opportunities to participate in specialist training courses offered by a variety of private organisers. The cost of these courses, however, is prohibitive for teachers. Only 23% of teachers in the vocational sector undertake further education and professional development in the course of their working lives. It can be concluded, therefore, that the professional development of vocational teachers is seriously inadequate. Support for the education and professional development of teachers comes, mainly, from the academic network and is confined to social and pedagogical studies conducted at universities, higher pedagogical schools and other higher education institutions offering pre-service teacher training.

7. *Links between the vocational teacher education and the employment system*

At the national level, there is no structure to foster dialogue between the different bodies involved in the education system. The needs and interests of vocational education are not represented in either the main Council for Higher Education or the Council for Teachers' Education and they are only of peripheral concern to the Ministry of Education and other bodies responsible for education policy. The situation of teachers in so-called "departmental schools", run by other ministries, appears to be better, especially in the case of agricultural school teachers. The new Centres for Practical Education, however, are beginning to organise activities jointly with employers and occupational organisations.

Development of vocational teacher and trainer training

At the moment, vocational teacher training cannot be said to be working well. There are problems:

- at the macro level, with the system, organisation and administration;
- at the intermediate level, with the institutions, educational model and curricula; and
- at the micro level, with the education and training that people receive.

Teacher education in Poland needs to be overhauled and a variety of different projects to do this have already been started. Current initiatives are in three main directions:

- the development of a system for accrediting third-level institutions, which is aimed at ensuring the *quality of academic institutions*;
- the introduction, on a stage-by-stage basis, of a system to regulate and standardise study programmes, which is aimed at ensuring the *quality of programmes*; and
- the creation of a system to improve and develop teachers' qualifications progressively throughout their working careers, which is aimed at improving the *quality of teachers*.

The formal system of teacher education and the conditions under which it has to function are a fundamental barrier to change. Teachers are educated by higher education institutions whose autonomy is protected and which are not subject to the education policy and influence of the Ministry. Although higher education institutions have undergone change, this has not spilled over into teacher training, which remains a peripheral activity in third-level institutions.

The Ministry of Education has announced a project for a thorough reform of the education system. Up to now, however, the project has not specified how the education and professional development of teachers, especially vocational teachers, are to change. Improving the quality of teachers, which is the pillar on which quality assurance in the education system rests, is the principal objective of the proposed reform. Poland, however, is still at the stage of social and political debate on the issue. The teaching professions and trades unions consider reforms to teaching itself to be most controversial. Changes in the education system may, therefore, run into obstacles that will slow down their momentum and operate against their success.

8. *Findings*

Teacher education programmes are developed on such an autonomous basis that it is difficult to ensure comparability in pedagogical teaching qualifications. Curricula and methods are too academic, theoretical and divorced from the school environment. Workshops and training sessions designed to develop the pedagogical skills and wider social competencies of student teacher are in short supply. Placements In schools are definitely too short to prepare teachers to begin work in their profession. The system is too atomised: over 30 autonomous higher education institutions offer widely differing pre-service teacher-training programmes. At the same time, there is no national quality assurance programme in place.

Teacher and Trainer Training in Romania

1. Information on Romania

- Romania has a population of 22.5 million people (at 1 July 1997).
- The unemployment rate is 12% (May 1999).
- The youth unemployment rate (under 25 years) is approximately 30%.
- Participation in initial vocational education and training is less than 65% of all students in secondary education.
- The dropout rate of vocational students is 4.9%.
- The length of compulsory education is 9 years.

A systematic, comprehensive and coherent approach to the reform of vocational education has been initiated in Romania since1994. The process started with the EU Phare Vocational Education and Training Reform Programme for vocational and post-high schools, which ended in 1998. The reform process is currently concerned with generalising the outcomes of the Phare programme and with restructuring the technical high schools.

There are legal attempts to shift from a high degree of centralisation and a weak school infrastructure to decentralised management and curriculum development. Reformed curricula have been based on preliminary labour market analyses. The role of the social partners in initial vocational education and training is reflected in the legal and institutional framework.

However, the country is facing a period of instability. Romania has the lowest investment in education among the countries of Central and Eastern Europe countries (3.2%). Compulsory education has been reduced from 10 to 8 years. Recently, the Parliament amended the Law of Education of 1995 and fixed compulsory education at 9 years. Only 60% of all 16 year-olds are undergoing some form of education and training.

The major challenges include:

- developing the national framework for vocational education and training and for continuing vocational training;
- developing learning material, especially textbooks, for vocational education and training; and
- providing systematic training for vocational teachers, especially on the pedagogical aspects of the new learning process.

2. The system of initial vocational education

Initial vocational education and training starts after the end of compulsory school, at the age of 15. The 9th grade will become part of compulsory education for the students who start the 5th grade in the new school year 1999-2000.

Vocational education is offered in:

- gymnasia for specialised training (technical, agricultural, forestry and economics gymnasia), which, after 4 years of study and the successful completion of examinations, provide both a baccalaureate (giving access to higher education) and a vocational certificate (allowing school leavers to qualify for jobs at the medium-trained technician level);

- day or evening courses at vocational schools, which, after 2-4 years of study (depending on the specialisation) and the successful completion of examinations, provide a vocational qualification at the skilled worker level; and
- apprenticeship schools, which are autonomous schools and could also be part of a school cluster ("grup scolar") and which, after 2-3 years of (mostly practical) training and the successful completion of examinations, provide a vocational qualification at the skilled worker level.

Vocational training is also provided through 1-3 year courses at the post-high level.

3. *Teachers and trainers in vocational education and training*

Teaching staff working in vocational, apprenticeship, post-high and foremen schools totals 11,045 persons, 6,781 teachers and 4,264 instructors-foremen. Of the total teaching staff, 55% are female (6,145 persons). There is one teacher to every 30 students.

The categories of teachers are:

- teachers in lower secondary education;
- teachers in upper secondary education (vocational schools, high schools or post-high schools);
- foremen/instructors; and
- associate teachers.

Teachers in lower secondary education have a degree from a higher education institution (university or college).

Teachers in upper secondary education have a degree from a higher education institution or an equivalent institution or have a post-graduate diploma.

Foremen/instructors have a post-high school diploma and a trainee period of at least three years in their special field.

Associate teachers are professional specialists who have no teacher training.

4. *The regulation of teaching*

The Ministry of National Education and its decentralised services manage the education system. It approves the core curriculum and the national standards of evaluation. It appoints and dismisses school directors in high and post-secondary schools. Inspectors and administrative departments share responsibilities for teaching and administrative supervision and control among themselves.

The School Inspectorate under the Ministry of National Education approves occupational areas and specialisation and is also in charge of teaching staff policy. Schools are responsible for carrying out vocational education and training programmes.

The universities, where most teacher training is carried out, are autonomous.

5. *Educational paths*

There are several types of courses which confer the right to practice the teaching profession:

- long-term higher education (4-6 years after 12 years of school), which entitles graduates to teach in any kind of school;

- short-term higher education (3-year day courses or 4-year evening courses after 12 years of school), after which graduates may teach theoretical courses in apprenticeship and vocational schools and practical skills only in high schools; and
- higher secondary (4-year day courses or 5-year evening course), high school and post high school (1-3 years) or foremen school (1-3 years) education (after 12 years of school) on the completion of which graduates may coordinate practical skills in apprenticeship schools, vocational schools, and high schools.

Initial training for teachers with higher education is provided at agricultural universities, academies and institutes of economics, technical colleges and institutes, polytechnics and universities.

Initial training of teachers with secondary education is carried out at foremen schools and at industrial and technical high schools.

6. *Initial training programmes for vocational teachers*

Before 1990, the curriculum, like all aspects of vocational education policy, was centralised and ideologically oriented. The content of the curriculum referred to both scientific and professional knowledge and the methods encouraged ex cathedra instruction. Thus, practical skills were only marginal and classroom instruction had no reference to real workplace situations.

Today, the main method used in training vocational teachers and trainers is traditional lectures, combined with applied (laboratory) work and workshop practice. In the traditional course programmes:

- curricula/syllabi concentrated on technical subject areas and there is little emphasis on pedagogical subjects;
- the teaching methods used are lecturing, demonstration and exercises;
- any connection between the organisational and management aspects of the course and the subject areas is incidental;
- educational and pedagogical issues are either an optional part of the formal curriculum or dealt with as part of the study of subject areas during pedagogical courses; and
- the study of sociological issues is arbitrary and depends on the subject area.

7. *Continuing education*

The teaching staff in pre-university educational institutions have a right to further training. This is provided, mainly, through:

- methodological and psycho-pedagogical training;
- conferences, seminars and debates; and
- further training courses in the different vocational areas.

Higher education institutions, teacher colleges and high schools deliver the training courses.

Teachers' Centres organise methodological courses. The staff of these centres (42 in all of Romania) consists of competent teachers selected for each specialisation (full-time or part-time, depending on the number of training courses). They offer support to further training departments or to teachers in higher education who are likely to become involved in further training.

Teaching staff, as well as management, guidance and control staff take part in further training programmes every 5 years.

Tenure in education

Teaching staff can obtain tenure in education when they meet the qualification requirements and have undergone a trainee period of at least 2 years. It is compulsory to take the tenure examination within 2 years of completion of the trainee period. The examination consists of school inspection and several oral and written tests. When the tenure is obtained, it is considered valid for any other didactic function.

The further education options open to teachers are:

- a didactic degree II, which is open to teachers with tenure;
- a didactic degree I, which is open to teachers who have a level II degree; and
- a Ph.D.

Didactic degrees obtained by foremen-instructors are recognised for any level of pre-university education and give holders a right to instruct at all levels for which they obtained the right to teach.

8. *Development of vocational teacher training*

The main reforms since the early 1990s have concentrated on issues such as: the organisation of education; curriculum development and textbooks; and assessment and examinations. The aims of reform programmes have been:

- to de-politicise vocational education and training;
- to render it more suitable to a democratic society and a market economy;
- to abolish the state monopoly in the provision of vocational education and training; and
- to decentralise the system.

The reform and development of teacher and trainer training has not yet been carried out. Developments in the initial and continuing training programmes are in the area of increased emphasis on the psycho-pedagogical training of teaching staff.

Educational reforms are now the subject of national debates but vocational education and training has had a modest part in this discussion. The debate about teacher and trainer training has been confined to narrow circles in the country and, in spite of the fact that the issues are widely known, it is quite difficult to break the higher education tradition in teacher training.

Most of the inspiration and training in new teaching and learning methodologies have come from international projects, particularly the 1994-97 Phare Vocational Education and Training Reform Programme.

9. *Connections between teacher and trainer training system and labour market*

The Phare Vocational Education and Training Programme has set up managerial structures that allow social dialogue and formal cooperation between schools and economic actors. These are:

- the Advisory Board, at national level;
- six Zone Development Committees, at regional level; and
- forty-two Local Development Committees, at county level.

These boards concentrate on issues which are only indirectly related to the training of teachers and trainers:

- facilitating knowledge of labour market trends;
- making schools aware of training needs;
- participation of the vocational education system in educational planning;
- appointing school representatives to joint teams on the school-leaving examination certification bodies;
- supporting schools in organising work placements for students; and
- supporting the schools to upgrade to new technologies.

10. *Findings*

Romania appears to have a well-developed system of further education at pre-university level. It is difficult to assess how widely spread the system is and whether it works. The teaching staff, management and guidance and control staff undergo further training every 5 years. New regulations try to facilitate teacher access to the outcomes of reform. According to an Order of the Ministry of Education, each teacher has been asked to attend at least 6 days training on curriculum reform in the school year 1998-1999. This training has been organised by the Teachers' Centres. The same regulation will apply in the next school year.

Teacher and Trainer Training in the Slovak Republic

1. Country information on the Slovak Republic

- The population is 5.269 million (86% are Slovakian-speaking and 14% speak Hungarian and other languages).
- The unemployment rate is 13.3% (1995).
- Participation in initial vocational education and training as a percentage of total enrolment is 82.3% (1990).
- The length of compulsory school is 9 years.

2. The system of initial vocational education and training

- **Apprentice training centres**
  These lead to lower level vocational qualifications. The number of schools is not available and the number of teachers is 477.
- **Secondary vocational schools**
  These provide vocational education and training programmes leading to skilled workers' qualifications. 358 schools offer these programmes and employ 13.478[6] teachers. The level of activity has been decreasing since 1989 (due to the changing labour market, but also to the low status of these schools). The study programmes last 2-3 years with a final examination, 4 years with Maturita.
- **Secondary Special Schools**
  These school offer professional programmes leading to technical, economic and administrative qualifications. There are 364 of these schools and the number of teachers in them is 14,844. This is a new type of school and their number has increased since 1989. The duration of programmes is 4 years with Maturita.

(The number of teachers mentioned in the Slovakian report is 23,320. *There seems to be a number of other educational staff, i.e. instructors, in the schools.*[7])

3. Teacher and trainer categories

There are three categories of teachers:

- teachers of technical subjects (general/theoretical vocational subjects);
- teachers of secondary school subjects (general subjects); and
- instructors who provide vocational, practical training.

The first two categories seem to add up to between 93-96% of the educational staff in secondary vocational schools and secondary special schools.

6 Numbers taken from Eurydice report 1997
7 From the Eurydice report

4. Regulations

Teachers of secondary schools must graduate from the faculties of education or subject faculties at universities.

Twelve per cent of teachers at secondary special schools and 16% at secondary vocational schools do not have the teaching qualifications required by the 1996 government decree of professional and educational competence.

Instructors normally graduate from vocational secondary schools and have a supplementary educational qualification or have a "pedagogical minimum" provided by teacher education faculties or in-service training providers.

Continuing training (in-service)

Supplementary pedagogical studies are regulated by a 1996 resolution of the Ministry of Education, which requires teaching staff to have a specified pedagogical qualification.

5. Education of teachers and trainers

Initial teacher training takes place in the pedagogical faculties of the different universities and is delivered in two forms:

- as a qualification in teaching for secondary school teachers of general education; and
- as branch (engineering) studies at (non-university) higher education institutions, supplemented with a course in education.

The pedagogical study starts from the 3rd year of study.

The duration is between 170 and 300 lessons over 3 or 4 terms.

The study can be taken also as distance courses:

- as consecutive, further education for graduates from technical universities; or
- as an in-service qualification course.

The teacher qualification course is delivered at many different institutions. Providers are universities, sectoral institutes, regional centres and NGOs.

6. Initial training programmes for vocational teachers

The universities are autonomous in drawing up curricula for teacher training.

There is a strong tendency to focus on theoretical and abstract elements in the education and training of teachers. This is mainly due to the fact that:

- those involved in teaching teachers and trainers at universities are themselves trained in universities and have knowledge of teaching only at university level;
- prevailing scientific and research traditions have little relevance for practical problems;
- the demand from students is for very specialised theoretical subjects; and
- students are required to produce a theoretical thesis as part of their degree programme.

The curricula for the teacher and trainer training are very differentiated according to the individual needs and interests. That means it is hard to see any clear standards in the training provided.

The amount of time given to teaching practice, general subjects and technical subjects does not appear to be well balanced. Too little attention is paid to ways of activating students and the lessons appear to be overloaded from the point of view of content.

The programme of study for the consecutive, supplementary, teacher qualification is firmly rooted in traditional concepts of school and schooling.[8]

7. *Continuing education and training of teachers and trainers*

Vocational teachers do have the possibility of undertaking further education but a relatively small proportion of them, 10%, takes part in continuous training every year.

Continuing education takes place at the universities and in the sectoral institutes. In the case of vocational teachers, continuing training is organised, mostly, by the State Institute of Vocational Education. Programmes and curricula are approved by the Ministry of Education. Examinations are set and diplomas awarded by the providers.

There is no general legislation on continuous education, stipulating the right to continuing vocational training for teachers and motivating them to take part.

However, a new programme has been introduced by the Decree on the Professional and Educational Competence of Educational Staff (1996). This is a qualification examination which is managed by the Ministry of Education and other state authorities. Students undertake a course of study for the examination and this is certified by appointed institutions. Educational staff with higher education and at least 5 years' teaching experience can take an examination for the first level of qualification in an appropriate field. A similar, second-level qualification examination can be taken by staff with at least 10 years' teaching experience. The qualification examinations open the way to promotion and lead to increases in salary. Participation in the programme is, however, still very limited and budgetary constraints led to the numbers admitted to it being cut in 1998. Between 3,000 and 4,000 teachers from all types of school participate in the programme each year.

In-service training

A general and introductory training course is organised by the schools for new teachers. Normally, a new teacher has a 1-year probation period under the supervision of an experienced teacher-tutor.

There is no coordination of training activities on national or regional level. In the in-service training system, there is an effort to give schools access to new innovative methods, new curricula and so forth. But the system lacks organising principles and concepts as well as well-developed programmes for the systematic upgrading of teachers' qualifications. The in-service activities provided often do not deal at all with the principles of quality awareness, the improvement of quality and proper evaluation.

8. *Development of vocational teacher training*

The present system of teacher and trainer training is insufficient and this has been made clear by several different reports.

Recommendations for a new vocational teacher training policy include:

- the transformation of the curriculum for teacher training;

8 All these criticisms are mentioned in the Slovakian report. They have emerged from several investigations and have lead to a proposal for new curricula for teacher training.

- the allocation of control of curriculum development and of teaching to an independent accreditation commission; and
- the creation of well-qualified institutions for continuous and in-service teacher training and of stronger networks between the teacher training centres.

The supplementary educational study centres are in particular need of re-assessment and the earlier accreditation of some of these may need to be revised.

It is also important to establish a new theoretical and practical platform in vocational teacher and trainer training. The main objectives of this would be:

- to promote pedagogical research on personal/professional growth and development and on the teaching of professions and qualifications;
- to draw up professional standards and precise qualification profiles for technical subject teachers in vocational education and training;
- to build up a modular system of supplementary pedagogical studies with linkages to distance education;
- to improve the status of the teaching professions by improving the material and financial condition of teachers;
- to build up information systems on education; and
- to implement a principle of feedback on educational efficiency by means of regular evaluations of the quality and relevance of teaching activities.

So far, there have been only a few changes, because of the material, financial, and personnel restrictions. However, the legislative provisions on in-service training adopted in 1996 should support the implementation of the new policy.

The recommendations outlined above emanate, first and foremost, from the Phare programmes to restructure the labour market (1993) and from the very intense levels of teacher training provided in pilot schools in the Phare programme.

9. *Links between teacher and trainer training and the labour market*

Relations between the social partners and the vocational education and training system are limited. Recently, a tripartite advisory body to the Council of Government on vocational education and training issues has been established. It will be some time, however, before the bodies involved, especially the trade unions, are able to participate fully and constructively in this process.

At the local level, the social dialogue can be an obstacle to pedagogical development, as large industrial plants which have not yet been restructured tend to dictate the design of vocational education and training. The result is that practices developed in the pre-transition period are continued.

The social partners are not involved in teacher and trainer training.

10. *Findings*

Regulations on teacher qualifications apply to the profession in general. There are no specific regulations or curricula for vocational teachers and trainers.

There is a need to develop a new curriculum, specifically for vocational teachers and including relevant subjects and practical training exercises, based on EU standards.

Teacher and Trainer Training in Slovenia

1. *Information on Slovenia*

- Slovenia has a population of 2 million people.
- The unemployment rate is 7.3% (1996).
- The youth unemployment rate is 18.8% (under 25 years).
- Participants in initial vocational education and training represent 77.6% of all students in secondary education[9].
- The dropout rate of vocational students is 20%.
- The length of compulsory education is 9 years.

Fundamental innovations, combining EU practice and Slovenian traditions, are being introduced through new legislation (the Law on Vocational Education and the Law on Adult Education, 1996). The main reforms should be fully implemented by the year 2000.

There is no separate system of vocational teacher and trainer training in Slovenia. The training system is common to all teachers/trainers at all school levels. All initial teacher training is provided by the university system, which comprises state universities and higher professional institutions.

2. *The system of initial vocational education and training*

The newly introduced forms of vocational education are:

- a dual (apprenticeship) system, which is intended as an alternative to the existing three-year school-based vocational programmes;
- professional courses (also called technical vocational courses), which are designed as six-month to one-year courses (programmes) for graduates from general secondary schools and lead to vocational qualifications on the completion of a final examination and, parallel to this, maturity courses, which are planned for graduates from four to five-year secondary technical/professional programmes who would like to continue their education at university;
- two-year professionally-oriented courses with a strong practical orientation (including placements in enterprises) which are offered by non-university higher vocational and professional schools (colleges);
- preparatory courses and examinations for master craftsmen, foremen and managerial staff; and
- occupational modules within the curricula of professional gymnasia, which are part of the general education stream and not vocational education and training, are specifically designed to prepare students for university and end with a Maturita examination.

9 Please note that Slovenia does not have a special vocational school system.

3. Teachers and trainers in vocational education and training

It is quite a problem to get the basic statistics on vocational teacher and trainer training in Slovenia because there is no separate vocational teacher and trainer training system. Statistical data are, therefore, limited. The total number of students enrolled in higher education and university programmes in the 1996/97 school year was 50,667. Only 2,776 are enrolled in teacher training programmes and, of these, 68% are women.

Approximately 2,500 teachers teach general subjects at secondary schools, 2,488 teach professional/theoretical subjects and 1,253 are practical trainers.

There are four categories of teachers:

- teachers of general subjects at vocational and technical schools;
- teachers of vocational-theoretical subjects at vocational and technical schools;
- vocational college lecturers (vocational-theoretical lecturers); and
- teachers who provide training in practical skills.

4. Teacher regulations

Regulations are issued by the Ministry of Education and Sport. From the start of the reform process, the Ministry has been trying to develop a policy for the vocational education sector which is coherent and likely to ensure that the vocational education and training provided matches the needs of the socio-economic environment.

The universities, where most of the teachers are educated, are autonomous.

5. Educational paths

There are two types of teacher and trainer training in Slovenia:

- initial (pre-service) teacher education, which is university-based; and
- continuing (in-service) training, which is organised in other public institutions in accordance with a law on developmental and advisory work in general, vocational and adult education.

Teachers in public vocational and technical schools must hold a recognised qualification to teach general and vocational-theoretical subjects, i.e. they must have a primary university degrees and pedagogical qualifications. The period of study is 4 years after 12 years in primary and secondary school.

Vocational college lecturers (vocational-theoretical lecturers) must have at least a primary university degree, pedagogical qualifications and three years' work experience.

Teachers/trainers of practical training and skills are required to have at least a secondary school qualification in the appropriate field, three years' work experience and pedagogical qualifications or a master craftsman's certificate.

6. Initial training programmes for vocational teachers

The initial education of secondary school teachers of general subjects is delivered via a four-year university programmes. Students usually study two disciplines in parallel programmes. They also acquire pedagogical qualifications. Initial teacher and trainer training is provided by both universities (Ljubliana and Maribor) and in autonomous higher education institutions.

There is no separate, initial (pre-service) training for teachers of vocational-theoretical subjects or for practical trainers in secondary schools. The teachers recruited for these posts usually have completed from three to four years of professional higher education studies and have some years' work experience. They have to take additional training in pedagogy to be qualified to teach vocational-theoretical subjects.

Training for all teachers/trainers in Slovenia has the common aims of:

- broadening and deepening the knowledge and skills of individuals in the different professions;
- introducing students to new theories and to the practical developments that are occurring in the professions and, thereby, revitalising the teaching process;
- motivating teachers and trainers to improve their pedagogical work;
- developing the teachers' abilities to react in a reflective and respectful manner; and
- providing opportunities for the personal and professional development of teachers and trainers

The main methods used in teacher training are lectures and practical work. There is practical training in schools for specific subjects and this includes the preparation and delivery of lessons in the classroom under the supervision of a teacher-tutor. The programmes consist of one to two study disciplines with a minimum of 375 to 450 lessons of organised study work per semester. There are also 2-4 weeks of continuous practical work per semester. Pedagogical training is organised when students have completed their studies in the chosen disciplines. The status of this programme is not secure, from an organisational and a financial point of view.

7. *Continuing education and training of teachers and trainers*

In-service training[10]

The laws on education lay down that every teacher should have 5 days of in-service training a year. The teachers' participation in the training programmes is evaluated and the points they receive are important for promotion. In-service training for teachers and trainers is provided by 141 different institutions. In the area of vocational education and training, the Centre for Vocational Education collects information on the demand for training and transfers it to the Centre for Permanent and Vocational Training. Programmes may be offered by any institution, enterprise or individual registered for educational activities.

The system of in-service training for teachers and trainers is the same for all teachers, from pre-school institutions to post-secondary vocational colleges. The system offers upgrading programmes that are also a condition for promotion. The programmes always include pedagogical courses, since this is the only pedagogical education for teachers of vocational-theoretical subjects, for trainers of apprentices and for teachers/trainers of practical skills.

Education for school leaders

According to the new school legislation (1996), all school principals should obtain a special principal's license. This will be obligatory by the year 2000 and after that possession of a headmaster's licence will be a necessary condition for competing in elections for principal of any school.

10 In Slovenia, in-service or continuing training is defined as the process of updating teachers' professional skills or broadening their educational horizon after they have acquired their initial qualifications. Examples include short courses, day conferences and distance-learning activities.

8. *Development of vocational teacher training*

Discussions and activities which will ultimately lead to a separate system of teacher and trainer training started in 1997. A Phare programme on "training the trainers" evoked a national debate which resulted in the conclusion that a separate system for vocational teacher and trainer training is needed in Slovenia. The issue is now under discussion at policy level. The new understanding is that of vocational education and training is no longer the exclusive domain of the educational sphere, but a shared responsibility of the education system and the labour market.

The challenges facing teacher training in Slovenia include:

1) developing methodologies for identifying teachers' needs;
2) identifying synergies between general and vocational subjects;
3) decentralising the system of in-service training;
4) defining the role of associate teachers (experts and businessmen), in transferring new qualification needs into schools;
5) encouraging exchanges between schools and the world of work (through the integration of work and learning, the development of mechanisms to transfer ideas and needs, ensuring that schools are informed about the economic environment and are able to include the skills the labour market needs in their curricula etc.);
6) planning in-service training on the basis of the above processes;
7) establishing a steering committee for in-service training in vocational education and training and defining its role;
8) defining the role which feedback from teachers can play in the curriculum planning process;
9) defining the role of teachers' associations in the different occupational sectors and identifying their needs; and
10) defining the role of advisers to the Centre of Vocational Education and promoting training in how to identify needs.

9. *Findings*

Slovenia has a well-established system of in-service training for teachers. Teachers get points for taking part in in-service training. The courses are provided at 141 different institutions, but it seems as if activities are organised very bureaucratically and are not, therefore, delivered 'just-in-time'. It simply takes too long from the time a need occurs until it is turned into an in-service course

In-service training is the only way of getting pedagogical training for trainers in practical skills. The length of pedagogical training for this category of teachers is very short (one week per year).

The overall impression is that the interest in participating in in-service training programmes is growing and this is a positive development. Nevertheless, it is interesting to note that professional/vocational courses are often repeated, because of demand, while pedagogical courses are often cancelled.

Slovenia has compulsory training for school principals. This is an interesting feature and is not often found in other countries.

European Training Foundation

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A cross country review of needs, achievements and obstacles in Central and Eastern Europe

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